

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM

Prepared By:

Old Colony Planning Council (OCPC)
70 School Street, Brockton, Massachusetts
508-583-1833 / www.ocpcrpa.org

Prepared For:

Transportation and Transportation Related Planning Activities From
October 1, 2015 through September 30, 2016

Prepared Under:

Unified Planning Work Program (UPWP) Task 1200

OLD COLONY
METROPOLITAN
PLANNING
ORGANIZATION
(MPO)

The preparation of this document has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code.

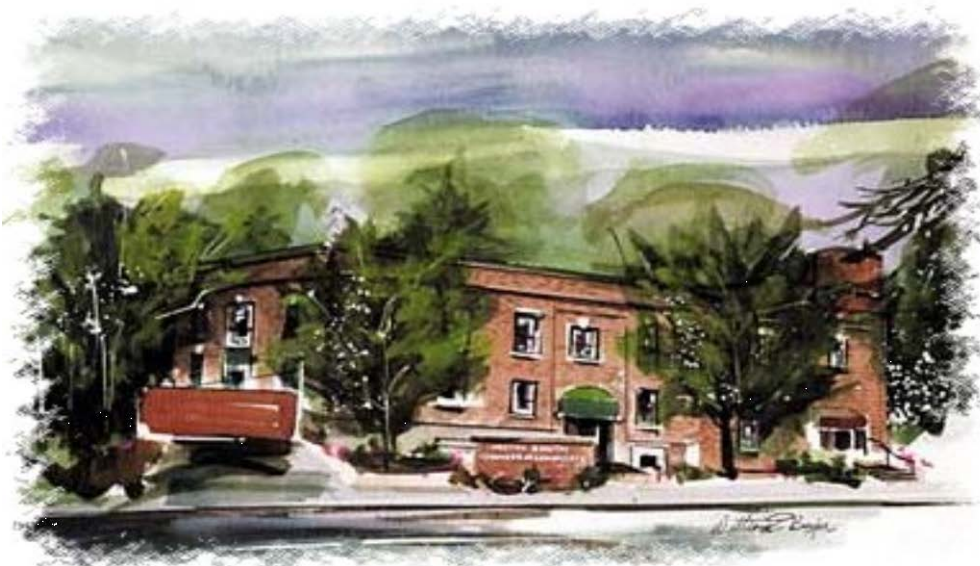
The views and opinions of the Old Colony Planning Council expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.



**ENDORSED BY
THE OLD COLONY MPO
ON JULY 28, 2015**

**ADJUSTED BY
THE OLD COLONY MPO
ON MAY 17, 2016**

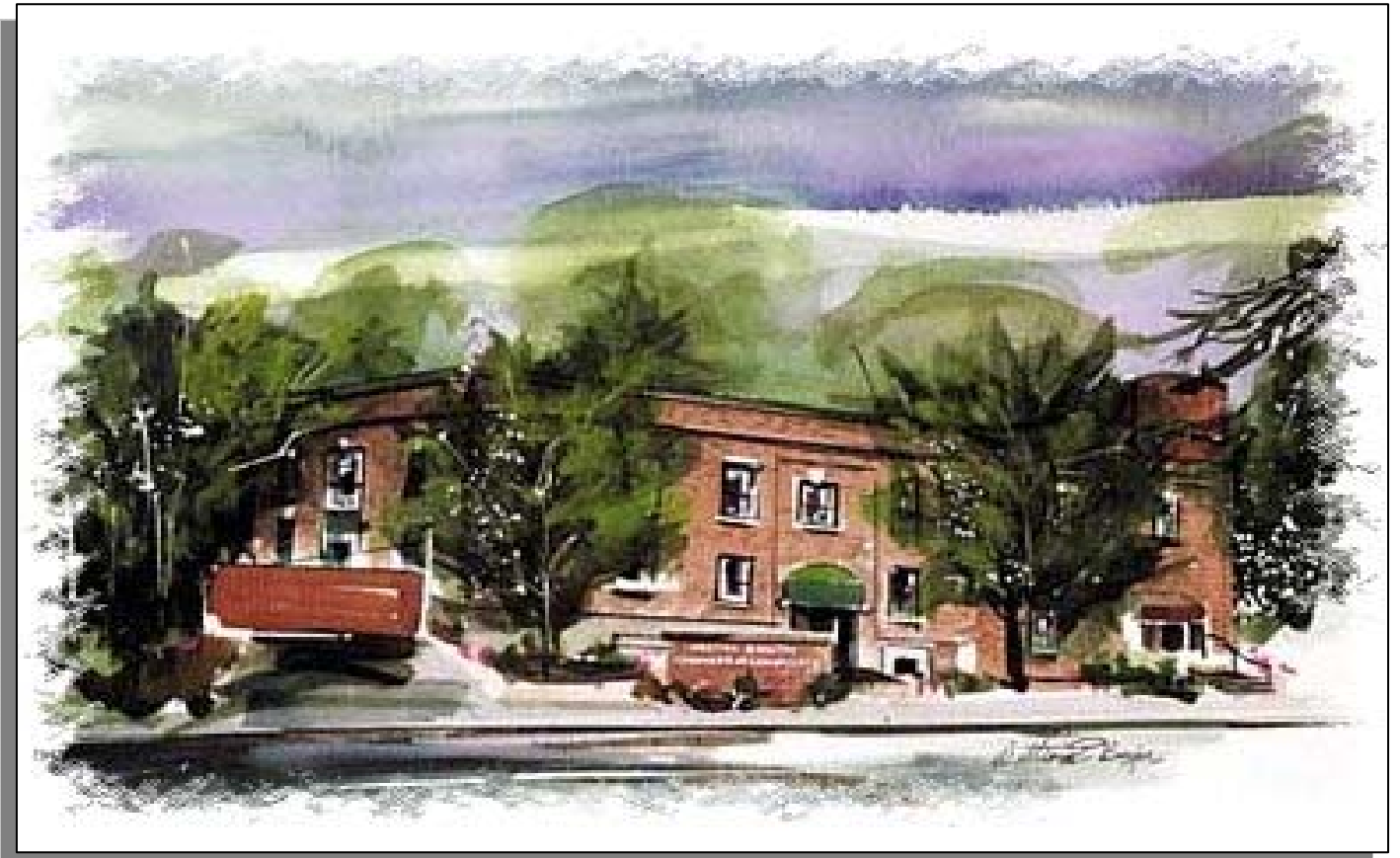
**PREPARED IN
COOPERATION WITH BAT,
FHWA, FTA, AND
MASSDOT**



OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)
FFY 2016
UNIFIED PLANNING WORK PROGRAM



- ENDORSED BY THE OLD COLONY MPO ON JULY 28, 2015
- ADJUSTED BY THE OLD COLONY MPO ON MAY 17, 2016



Prepared By:

Old Colony Planning Council, 70 School Street, Brockton, MA
508-583-1833
www.ocpcrpa.org

Prepared For:

Transportation and Transportation Related Planning Activities From
October 1, 2015 through September 30, 2016

Prepared Under MassDOT Contracts 69649 and 81448:

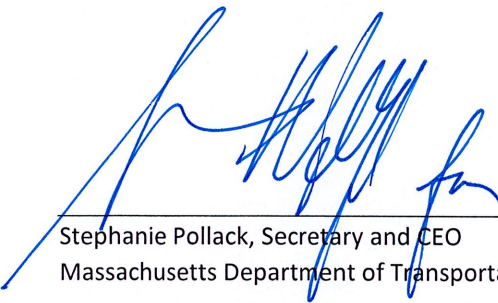
UPWP Task 1200

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

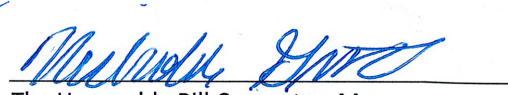
FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

ENDORSEMENT OF FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM

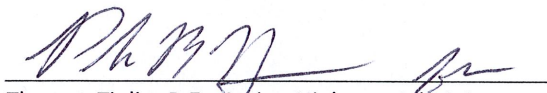
This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization, at their Old Colony MPO meeting on July 28, 2015 hereby approve and endorse the FFY 2016 Old Colony Unified Planning Work Program (UPWP) in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.


Stephanie Pollack, Secretary and CEO
Massachusetts Department of Transportation


7/28/15
Date


The Honorable Bill Carpenter, Mayor
City of Brockton

7/28/15
Date


Thomas Tinlin, P.E., Acting Highway Administrator
Massachusetts Department of Transportation


7/28/15
Date


Kenneth Tavares, Chairman
Plymouth, Board of Selectmen

7/28/15
Date


Reinald G. Ledoux, Jr., Administrator
Brockton Area Transit

7-28-15
Date


Eldon Moreira, Member
West Bridgewater, Board of Selectmen

7/28/15
Date


Lee Hartmann, AICP, President
Old Colony Planning Council

7-28-15
Date

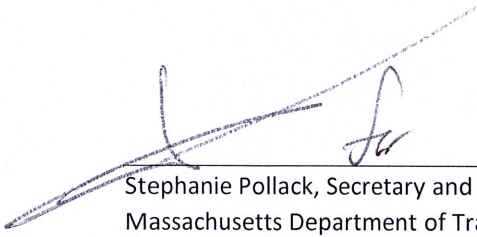

Daniel Salvucci, Vice-Chairman
Whitman, Board of Selectmen

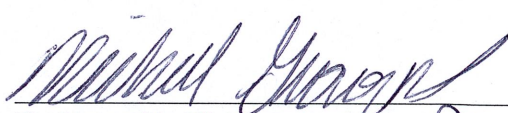
7/28/15
Date

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

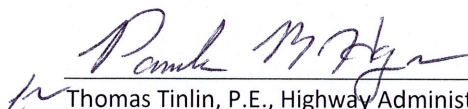
ENDORSEMENT OF FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP) ADJUSTMENT 1

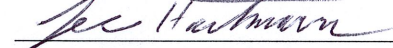
This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization (MPO), at their Old Colony MPO meeting on May 17, 2016, hereby approve and endorse the FFY 2016 Old Colony Unified Planning Work Program (UPWP) Adjustment 1 in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.


Stephanie Pollack, Secretary and CEO
Massachusetts Department of Transportation

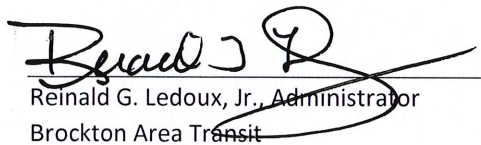
5/17/16
Date 
The Honorable Bill Carpenter, Mayor *for*
City of Brockton


5/17/16
Date


Thomas Tinlin, P.E., Highway Administrator
Massachusetts Department of Transportation


5-17-16
Date *for* 
Kenneth Tavares, Chairman
Plymouth, Board of Selectmen

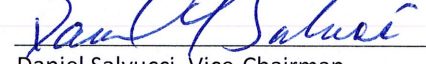
Date


Reinald G. Ledoux, Jr., Administrator
Brockton Area Transit

5.17.2016
Date 
Eldon Moreira, Chairman
West Bridgewater, Board of Selectmen

5/17/16
Date


Lee Hartmann, AICP, President
Old Colony Planning Council

5-17-16
Date 
Daniel Salvucci, Vice-Chairman
Whitman, Board of Selectmen

5/17/16
Date

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TABLE OF CONTENTS

INTRODUCTION	1
1000: Management and Support of the Planning Process and Certification Activities	8
1100 - 3C Program Support	9
1200 - Unified Planning Work Program (UPWP)	12
1300 - Public Participation Program (PPP)	13
1400 - Transportation Improvement Program (TIP)	15
1500 - Title VI and Environmental Justice (EJ)	17
2000: Data Collection and Analysis Activities	18
2100 - Demographic Surveillance and Road Inventory Update	19
2200 - Highway Data Surveillance and System Monitoring	21
2300 - System Planning Resource Activities	23
2400 - Geographic Information System (GIS)	24
2500 - Management Systems (Congestion, Land Use, Pavement & Safety), and Travel Demand Modeling	25
3000: Short Range and Long Range Transportation Planning Activities	31
3100 - Regional Traffic Studies, ITS, and Intermodal Planning	32
3200 - Local Highway Transportation Technical Assistance	34
3300 - Avon and Brockton Route 28 Corridor Study	35
3400 - Duxbury Route 3A Corridor Study	37
3500 - MAP-21 Performance Management	39
3600 - Bicycle and Pedestrian Connectivity and Safety Study	41
4000: Other Transportation Technical Activities, Planning Staff, Funding Sources, Budgets, and Tasks	43
4100 - Transit Technical Assistance, and Elderly and Individuals with Disabilities Support	44
4200 - BAT Planning and Technical Studies	46
4300 - South Coast Rail Technical Assistance	47
Estimates of Other OCPC Funding Sources	48
Listing of Other Transportation Planning Activities	48
Transportation Planning Staff and Time Devoted to 3C Transportation Planning Tasks	49
Summary of Funding Sources, Budgets, and Tasks	50
APPENDICES	
Appendix A: UPWP Adjustment approved by the Old Colony MPO on May 17, 2016	A-1

DISCLAIMER

The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code.

The views and opinions of the Old Colony Planning Council expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation.

NOTICE OF NONDISCRIMINATION RIGHTS AND PROTECTIONS TO BENEFICIARIES

Federal “Title VI/Nondiscrimination” Protections

The Old Colony Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of **race, color, or national origin** (including **limited English proficiency**), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of **age, sex, and disability**. These protected categories are contemplated within the Old Colony MPO’s Title VI Programs consistent with federal interpretation and administration. Additionally, the Old Colony MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

The Old Colony MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on **race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry**. Likewise, the Old Colony MPO complies with the Governor’s Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on **race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status** (including Vietnam-era veterans), or **background**.

Additional Information

To request additional information regarding Title VI and related federal and state nondiscrimination obligations, please contact:

Old Colony Planning Council
Title VI/ Nondiscrimination Coordinator
Pat Ciaramella
70 School Street
Brockton, MA 02301
508-583-1833 Extension 202
pciaramella@ocpcrpa.org

Title VI Specialist

MassDOT, Office of Diversity and Civil Rights
10 Park Plaza
Boston, MA 02116
857-368-8580
TTY: 857-368-0603
MASSDOT.CivilRights@state.ma.us

Complaint Filing

To file a complaint alleging a violation of Title VI or related federal nondiscrimination law, contact the Title VI Specialist (above) within 180 days of the alleged discriminatory conduct.

To file a complaint alleging a violation of the state's Public Accommodation Law, contact the Massachusetts Commission Against Discrimination within 300 days of the alleged discriminatory conduct at:

Massachusetts Commission Against Discrimination (MCAD)
One Ashburton Place, 6th Floor
Boston, MA 02109
617-994-6000
TTY: 617-994-6196

Translation

English

If this information is needed in another language, please contact the MPO Title VI Coordinator at 508-583-1833 ext. 202.

Spanish

Si necesita esta información en otro idioma, por favor contacte al coordinador de MPO del Título VI al 508-583-1833 ext. 202.

Portuguese

Caso estas informações sejam necessárias em outro idioma, por favor, contate o Coordenador de Título VI da MPO pelo telefone 508-583-1833, Ramal 202

Chinese Simple

如果需要使用其它语言了解信息，请联系Old Colony大都会规划组织（MPO）《民权法案》第六章协调员，电话508- 583-1833，转202。

Chinese Traditional

如果需要使用其他語言瞭解資訊，請聯繫Old Colony大都會規劃組織（MPO）《民權法案》第六章協調員，電話508- 583-1833，轉202。

Vietnamese

Nếu quý vị cần thông tin này bằng tiếng khác, vui lòng liên hệ Điều phối viên Luật VI của MPO theo số điện thoại 508- 583-1833, số máy nhánh 202.

Haitian Creole

Si yon moun bezwen enfòmasyon sa a nan yon lòt lang, tanpri kontakte Koòdonatè a Title VI MPO nan 508-583-1833 ext. 202.

French Creole

Si yon moun vle genyen enfòmasyon sa yo nan yon lòt lang, tanpri kontakte Kowòdinatè MPO Tittle VI la nan nimewo 508-583-1833, ekstansyon 202.

Russian

Если Вам необходима данная информация на любом другом языке, пожалуйста, свяжитесь с Координатором Титула VI в МРО по тел: 508-583-1833, добавочный 202.

French

Si vous avez besoin d'obtenir une copie de la présente dans une autre langue, veuillez contacter le coordinateur du Titre VI de MPO en composant le 508-583-1833, poste 202.

Italian

Se ha bisogno di ricevere queste informazioni in un'altra lingua si prega di contattare il coordinatore MPO del Titolo VI al 508- 583-1833 interno 202

Mon-Khmer, Cambodian

ប្រសិនបើលោក-អ្នកត្រូវការរបកប្រែពីភាសានេះ សូមទាក់ទងអ្នកសម្របសម្រួលជំពូកទី6 របស់ MPO តាមរយៈលេខទូរស័ព្ទ **508-583-1833** រួចភ្ជាប់ទៅលេខ **202**។

Arabic

إذا كنت بحاجة إلى هذه المعلومات بلغة أخرى، يُرجى الاتصال بمنسق الفقرة السادسة لمنظمة التخطيط الحضري على الهاتف: 508- 583-1833 و ثم اضغط الأرقام 202.

*Updated April 2015
Old Colony Planning Council*

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

INTRODUCTION

The Old Colony Metropolitan Planning Organization (MPO) implements and conducts a continuing, cooperative, and comprehensive transportation planning process that results in plans, programs, and projects that encompass all transportation modes and that support the region's vision and communities' goals. The Old Colony MPO plans for the movement of both people and goods within the region by all modes of travel, including highways, rail, public transportation, bicycles, and foot. It also plans for the connections linking these modes.

The FFY 2016 Unified Planning Work Program (UPWP) describes and provides budgetary information for the transportation planning tasks and activities, which are to be conducted in the region during the coming year. The UPWP is a federally required certification document, which is prepared and endorsed annually by the Old Colony MPO, prior to the start of the planning program. The Old Colony Planning Council (OCPC) has the responsibility of preparing the UPWP and conducting the tasks contained here within. The planning activities are organized by task element in a format that will allow efficient administration, management, and reporting.

The FFY 2016 UPWP describes the work to be accomplished by the Old Colony MPO. Transportation planning activities are described as procedures under specific tasks. For each task, the anticipated accomplishment or product and the estimated work force resources needed are provided. For each task, the total staffing requirements, budget, and sources of funding are also provided. For management convenience, similar tasks are grouped into the following elements:

- 1000 - Management and Support of the Planning Process and Certification Activities
- 2000 - Data Reconnaissance, Acquisition, and Analysis Activities
- 3000 - Short Range and Long Range Transportation Planning Activities
- 4000 - Other Transportation Technical Activities

Furthermore, the UPWP is a planning and budgeting tool that is used by OCPC, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Brockton Area Transit (BAT), and Massachusetts Department of Transportation (MassDOT) as the Scope of Services for the contracting for planning services, and may be amended during the program year with approval of the Old Colony MPO.

Continued growth in population, employment, and housing and the associated increases in travel demand continue to place pressure on the transportation system in the Old Colony Region. The Regional Transportation Plan (RTP) represents the Old Colony MPO's effort to create a document and a process that will meet the challenges of preserving and expanding a truly intermodal transportation system. The RTP includes goals and policies, analyses and recommendations necessary to build and maintain an efficient, effective, and affordable regional transportation system. It is the intention of the Old Colony MPO to build on the current system, striving to make it comprehensive and multi-modal. The goal is a balanced range of well-connected transportation options that will optimize each travel mode: automobile, transit, rail, bicycle, and pedestrian, boat, air, and truck. The RTP identifies the region's transportation project needs for the next twenty years. The principal way in which RTP recommendations will be translated into action is through the Transportation Improvement Program (TIP). The TIP is a multimodal list of investments for which federal surface transportation funds will be used. The TIP covers a four-year period and is updated every year. It must be based on a reasonable estimate of funds available to the region.

The FFY 2016 UPWP continues to expand on several major tasks that are specifically targeted to implement provisions of several pieces of federal legislations, such as the Moving Ahead for Progress in the 21st Century (MAP-21), the Clean Air Act Amendments of 1990, and the Americans with Disabilities Act. The Old Colony MPO develops its programs with regional needs in mind, and in alignment with the MAP-21 Planning Factors. The federal transportation act, the MAP-21 identifies eight (8) Planning Factors that Metropolitan Planning Organizations, such as the Old Colony MPO, must consider in their Unified Planning Work Programs.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

MAP-21: Eight Planning Factors

1. **Economic Vitality – Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.** OCPC staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to changes of delay and emissions. Reduction in traffic delay has a direct consequence on economic vitality both through the timely arrival of commuters and goods and reduction in fuel expenses and losses due to air pollution. The RTP directly supports these efforts through the goal: “Promote Policies that Ensure Economic Vitality and Sustainability.” OCPC directly supports regional productivity through its economic development mission manifested in the Regional Policy Plan, including support of the federally approved Old Colony Comprehensive Economic Development Strategy priority projects.
2. **Safety – Increase the safety of the transportation system for motorized and non-motorized users. Review safety data, goals, objectives, and strategies to promote safety. In addition, the Strategic Highway Safety Plan should be incorporated into the long-range plan.** OCPC shall apply specific criteria in the review of transportation strategies. These criteria are applied to estimated changes in safety. The primary goal of the RTP is focused on safety and security: “Enhance Safety and Security.” Safety is of such importance that it is recognized in its own chapter of the RTP.
3. **Security – Increase the security of the transportation system for motorized and non-motorized users. MPOs should look at both transit and highways networks and develop appropriate goals and strategies. Review current plans for emergency planning and security elements, identify critical facilities and transportation systems, and help define the roles of the various players in promoting security.** The primary goal of the RTP is focused on safety and security: “Enhance Safety and Security.” Security is of such importance that it is recognized in its own chapter of the RTP. One area of additional security planning that applies is that of traffic impacts due to extreme weather events such as impending hurricanes, and climate changes. OCPC has participated in the Massachusetts Emergency Management Agency (MEMA) Massachusetts State Police efforts regarding the Cape Cod Evacuation Plan.
4. **Mobility – Enhance the integration and mobility of the transportation system, across and between modes, for people and freight.** OCPC shall apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through its goal: “Enhance and Protect Regional Mobility, and Foster Sustainable, Healthy, and Livable Communities.”
5. **Environment – Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.** The RTP supports this planning factor through three goals: “Promote Environmental Protection and Climate Change Adaptation, and Pursue the GreenDOT Vision and achieve the three GreenDOT goals.” The RTP and therefore the UPWP includes a focus on addressing Climate Change. Where appropriate, UPWP tasks will include assessments of vulnerabilities and negative risks that climate change effects or extreme weather events pose, to the region’s transportation infrastructure. These vulnerabilities and risks will be seriously considered when planning future improvements. Where appropriate, UPWP tasks will develop adaptation strategies that will enable the region to implement improvements appropriately. The reduction of greenhouse gas emissions (GHG) remains an important goal in addressing climate change. UPWP tasks are encouraged that reduce VMT and congestion.
6. **System Integration – Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.** The Old Colony MPO staff shall apply specific criteria in the review of transportation strategies. These criteria are applied to improvements in multimodal accessibility. The RTP supports these efforts through these performance measures: “Increasing bicycle and pedestrian infrastructure networks and amenities in the region, Increasing multimodal transportation

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

centers (Transit Oriented Development) that serves business, residential, and mixed-use developments, and Improving human service coordination, mobility, and accessibility for elderly, youth, and individuals with disabilities populations.” Where appropriate, UPWP tasks will support the enhancement of the movement of goods throughout the Old Colony region. To further this goal, OCPC will continue to develop knowledge and skills regarding the integration of goods movement and seek to meet with stakeholders representing the freight shipping community.

7. **System Management – Promote efficient system operation and management. The Old Colony MPO supports Operation and Management Strategies (O and M) for both the transit and highway networks.** The RTP supports this planning factor through this performance measure: “Maintaining and preserving transit, highway, and bridge infrastructure.” As part of the RTP development, OCPC utilizes a pavement management system to develop costs and recommended repair for operation, preservation, and maintenance of the federal aid network. Additionally, the Old Colony TIP contains operation and maintenance costs for the federal aid network and BAT.
8. **System Preservation – Emphasize the preservation of the existing transportation system.** The RTP supports this planning factor through this goal: Enhance and Protect Regional Mobility. The RTP also supports this performance measure: Maintaining and preserving transit, highway, and bridge infrastructure. As part of the RTP development, OCPC utilizes a pavement management system to develop costs and recommended repair for operation, preservation, and maintenance of the federal aid network.

Consistent with U.S. Department of Transportation Secretary Foxx’s strategic objectives for the Surface Transportation Program, the FFY 2016 UPWP emphasizes the planning emphasis areas of MAP-21 Implementation, Regional Models of Cooperation, and Ladders of Opportunity.

- MAP-21 Implementation - The Old Colony MPO continues to develop its performance management approach to transportation planning and programming. Performance-based planning and programming includes using transportation performance measures, setting targets, reporting performance, and programming transportation investments directed toward the achievement of transportation system performance outcomes. Appropriate UPWP work tasks include working with local planning partners to identify how to implement performance-based planning provisions such as collecting performance data, selecting and reporting performance targets for the metropolitan area, and reporting actual system performance related to those targets. Such activities are included in the FFY 2016 through tasks such as the Management Systems (Congestion, Pavement, Safety, and Land Use), and the MAP-21 Performance Management.
- Regional Models of Cooperation - The Old Colony MPO seeks to ensure a Regional Approach to Transportation Planning by Promoting Cooperation and Coordination across MPO and Transit Agency Boundaries. To improve the effectiveness of transportation decision making, the Old Colony MPO thinks beyond traditional borders and conducts a coordinated approach to transportation planning. A coordinated approach supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across boundaries. Improved multi-jurisdictional coordination by MassDOT, MPOs, and providers of public transportation can reduce project delivery times and enhance the efficient use of resources, particularly in urbanized areas that are served by multiple MPOs. During FFY 2016, the Old Colony MPO will continue to coordinate planning activities within the Boston Urbanized Area (UZA) with MassDOT and the common MPOs, and seek to update the Boston UZA Coordination Memorandum of Understanding (MOU) to ensure that there are effective processes for cross-jurisdictional communication to improve collaboration, policy implementation, technology use, and performance management.
- Ladders of Opportunity - The Old Colony MPO, as part of the transportation planning process, identifies transportation connectivity gaps in accessing essential services. Essential services include employment, health care, schools/education, and recreation. The FFY 2016 UPWP includes efforts to develop and

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

implement methods to identify gaps in the connectivity of the transportation system and developing infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to essential services. As such, examples include the Bicycle and Pedestrian Connectivity and Safety Study (assessing the connectivity and safety and condition of pedestrian and bicycle facilities; and evaluating compliance with Americans with Disabilities Act, particularly around schools, concentrations of disadvantaged populations, social services, medical, and transit facilities), the Congestion Management Process, the Brockton Route 28 Corridor Study, and the Duxbury Route 3A Corridor Study. The FFY 2016 UPWP also includes tasks to develop the 2016 Public Participation Plan, evaluate the effectiveness of public participation plan for engaging transportation-disadvantaged communities in the transportation decision-making process, and to review and update the Section 5310 Coordinated Human Service Public Transportation Plan, as appropriate.

This year's UPWP efforts focus on the development of the Duxbury Route 3A Corridor Study, the Brockton Route 28 Corridor Study, the Bicycle and Pedestrian Connectivity and Safety Plan, the MAP-21 Performance Management and related Performance Measures and Target development, continued development of the Regional Travel Demand Model (TransCAD), operation of the Congestion Management Process, operation of the Safety Management System, operation of the Pavement Management System, operation of the Land Use Management System, and the development of the Transportation Improvement Program. Attention is also focused on the regional highway data surveillance program (including counting of bicycles and pedestrians), maintaining regional databases, adjusting and amending certification documents as needed, and implementing the management systems. OCPC continues to integrate the Geographic Information Systems into various tasks and plans undertaken. As indicated in the title of the Federal transportation act, the safety of our transportation network has become an increasing priority, and a key consideration in the selection and prioritization of future projects. Tasks within the UPWP are consistent with the goals of the RTP. As an example, the Plan supports efforts to reduce congestion, improve safety, and develop capital projects that represent an efficient expenditure of public dollars. Such efforts are addressed in this UPWP under multiple tasks such as the Management Systems of Congestion, Land Use, Pavement, and Safety, along with the TIP.

MAP-21 continues to prioritize the concept of Sustainability and Livability within the transportation planning process. This concept is addressed in the 2016 Regional Transportation Plan, and in the Bicycle – Pedestrian Connectivity and Livability Study. Beyond those efforts, one method for measuring the sustainability of a highway project is to assess the project against existing best practices. With this in mind, FHWA has developed and released a web-based tool known as the Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). As such, the Old Colony MPO will continue to consider sustainability and livability, and seek to utilize the INVEST Tool during the implementation of the 2016 UPWP.

Public participation continues to be a vital element of the transportation planning process. The encouragement of participation and provision of meaningful access to all local citizens in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. Community and transit representatives of the Old Colony Joint Transportation Committee (JTC) meet typically monthly on the second Thursday to discuss transportation investments and issues of regional importance. The Old Colony MPO meets several times per year to discuss and coordinate transportation planning issues, and to review and endorse certification documents. A Public Participation Program (PPP) was developed to solicit input to the various tasks and programs undertaken. This process will continually be reviewed and refined as necessary.

The FFY 2016 UPWP is consistent with Federal Planning Regulations and Other Federal Legislative Requirements.

Moving Ahead for Progress in the 21st Century (MAP-21).

This legislation requires all MPOs to carry out the 3C process. Activities the MPOs must perform to meet this requirement are:

- Preparation of the RTP, the TIP, and the UPWP
- Establishment and oversight of the public participation process

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

- Maintenance of transportation models and data resources to support air quality conformity determinations as well as long-range and short-range planning efforts

Title VI of the 1964 Civil Rights Act, Executive Order 12898, Executive Order 13166, and Executive Order 13330

Federal "Title VI/Nondiscrimination" Protections

The Old Colony Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of **race, color, or national origin** (including **limited English proficiency**), be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, the Federal Transit Administration, or both prohibit discrimination on the basis of **age, sex, and disability**. These protected categories are contemplated within the Old Colony MPO's Title VI Programs consistent with federal interpretation and administration. Additionally, the Old Colony MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with US Department of Transportation policy and guidance on federal Executive Order 13166.

State Nondiscrimination Protections

The Old Colony MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 §§ 92a, 98, 98a, prohibiting making any distinction, discrimination, or restriction in admission to or treatment in a place of public accommodation based on **race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry**. Likewise, the Old Colony MPO complies with the Governor's Executive Order 526, section 4 requiring all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on **race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status** (including Vietnam-era veterans), or **background**.

Executive Order 12898, dated February 11, 1994, expands upon Title VI, requiring each federal agency to achieve environmental justice by identifying and addressing any disproportionately high adverse human health or environmental effects, including interrelated social and economic effects, of its programs, policies, and activities on minority or low-income populations.

On April 15, 1997, the U.S. Department of Transportation issued its Final Order to Address Environmental Justice in Minority Populations and Low-Income Populations. Among other provisions, this order requires programming and planning activities to:

- Explicitly consider the effects of transportation decisions on minority and low-income populations
- Provide meaningful opportunities for public involvement by members of minority and low income populations
- Gather (where relevant, appropriate, and practical) demographic information such as the race, color, national origin, and income level of the populations affected by transportation decisions
- Minimize or mitigate any adverse impact on minority or low-income populations

Executive Order 13166, dated August 11, 2000, is intended to ensure compliance with Title VI of the Civil Rights Act of 1964 by specifically calling for improved access to federally conducted and federally assisted programs and activities for persons who, as a result of national origin, have limited English proficiency (LEP). To comply with the order, MPOs are required to develop and implement a system by which LEP persons can meaningfully participate in the transportation planning process.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

FTA Environmental Justice Policy Guidance For Federal Transit Administration Recipients Circular 4703.1 (2012) provides recommendations on how to fully engage environmental justice populations in the public transportation decision-making process; how to determine whether environmental justice populations would be subjected to disproportionately high and adverse human health or environmental effects as a result of a transportation plan, project, or activity; and how to avoid, minimize, or mitigate these effects.

FTA Title VI Circular to 4702.1B (2012) provides guidance to grantees on how to comply with Title VI regulations, as well as to ensure grantees provide meaningful language access to persons who are limited English proficient.

1990 Clean Air Act (CAA)

Conformity determinations must be performed for capital improvement projects that receive federal funding and for those that are considered regionally significant, regardless of the funding source. These determinations must show that the RTP and TIP will not cause or contribute to any new air quality violations, will not increase the frequency or severity of any existing air quality violations in any area, and will not delay the timely attainment of the air quality standards in any area. Transportation control measures (TCMs) identified in the State Implementation Plan (SIP) for the attainment of air quality standards is federally enforceable.

The Americans with Disabilities Act (ADA)

Title III of the Americans with Disabilities Act requires all transportation projects, plans, and programs to be accessible to people with disabilities. At the MPO level, this means that public meetings must be held in accessible buildings and MPO materials must be made available in accessible formats.

The period covered by each contract described in this document by funding source is as follows:

FUNDING SOURCES

FHWA PL/ MassDOT	October 2015 through September 2016
FTA 5303/ OCPC	April 2015 through March 2016
BAT	July 2015 through June 2016
South Coast Rail/ MassDOT	January 2015 through December 2016

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

List of Acronyms

3C:	Comprehensive, Cooperative, and Continuing Planning Process
ADA:	Americans with Disabilities Act
BAT:	Brockton Area Transit Authority
CAAA:	Clean Air Act Amendments of 1990
CMP:	Congestion Management Process
EIR:	Environmental Impact Report
EJ:	Environmental Justice
ENF:	Environmental Notification Form
EPA:	Environmental Protection Agency
FHWA:	Federal Highway Administration
FTA:	Federal Transit Administration
GATRA:	Greater Attleboro-Taunton Regional Transit Authority
JTC:	Joint Transportation Committee
LAP:	Language Access Plan
LEP:	Limited English Proficient
LUMS:	Land Use Management System
MassDOT:	Massachusetts Department of Transportation
MBTA:	Massachusetts Bay Transportation Authority
MOU:	Memorandum of Understanding
MPO:	Metropolitan Planning Organization
NHS:	National Highway System
PMS:	Pavement Management System
PPP:	Public Participation Plan
RTP:	Regional Transportation Plan
SIP:	State Implementation Plan
SMS:	Safety Management System
STP:	Surface Transportation Program
TCM:	Transportation Control Measure
TIP:	Transportation Improvement Program

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

1000 - MANAGEMENT AND SUPPORT OF THE PLANNING PROCESS AND CERTIFICATION ACTIVITIES

In order to properly support and effectively control the transportation planning activities of the Old Colony Metropolitan Planning Organization (MPO), program support activities must be undertaken. These tasks allow for the functioning and the continued certification of the Old Colony MPO in accordance with the Commonwealth of Massachusetts and U.S. DOT requirements.

1100 - 3C Program Support

1200 - Unified Planning Work Program (UPWP)

1300 - Public Participation Program (PPP)

1400 - Transportation Improvement Program (TIP)

1500 - Title VI and Environmental Justice (EJ)

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 1100 - 3C PROGRAM SUPPORT

OBJECTIVE:

To manage, support, and provide the capability to maintain an open, comprehensive, cooperative and continuing (3C) transportation planning and programming process at all levels in conformance with applicable Federal and State requirements and guidelines. Tasks include preparation and presentation of transportation plans and programs (i.e. Regional Transportation Plan (RTP), Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), Public Participation Plan (PPP), and other transportation studies); MEPA reviews; gaming reviews and technical assistance; coordination of transportation planning activities with other local and state agencies, and other MPOs; technical assistance and information related to transportation planning to the public, local, state and federal agencies; timely response to relevant planning studies by local, state, and federal agencies; and administer contracts.

PREVIOUS WORK:

- Maintenance and operation of the Old Colony Metropolitan Planning Organization (MPO) and Old Colony Joint Transportation Committee (JTC).
- Maintenance and federal certification of a viable and ongoing 3C Transportation Planning Process.
- Distribution of information on federal and state rules and regulations.
- Reviews, comments, and site visits relating to Environmental Notification Forms and Environmental Impact Reports/Environmental Impact Statements.
- Administration of Massachusetts Department of Transportation, Federal Highway Administration, Federal Transit Administration, Brockton Area Transit, Greater Attleboro-Taunton Transit Authority, and Executive Office of Energy and Environmental Affairs contract needs.
- Assistance with statewide transportation planning programs.
- Solicitation and analysis of Congestion Mitigation and Air Quality Projects.
- Input and support for economic and community development programs.
- Preparation of 3C certification documents.
- Support for public participation and private involvement in the 3C process, Federal Highway Administration, Federal Transit Administration and air-quality programs
- Provision of ongoing technical assistance to departments, agencies, authorities, and communities.

PROCEDURES:

1. Provide administrative and technical support to the 3C regional planning process such as: Provide community liaison activities and short term planning assistance to OCPC communities on transportation planning matters; Review Federal and State transportation programs, guidelines, circulars and manuals, plans and regulations as may be required or necessary; Provide for and support public and private involvement in the 3C Planning Process; Participate in informational programs on transportation, air quality, hazardous waste, energy conservation, accessibility, casinos/ gaming, and other planning.
2. Provide and maintain coordination for Old Colony MPO activities including the preparation and presentation of transportation plans and programs (e.g. Unified Planning Work Program, Regional Transportation Plan, Transportation Improvement Program, Amendments, etc., Public Participation Plan), developed through the public participation process. Distribute documents/amendments to the Old Colony MPO for appropriate action and/or endorsement as needed. Develop documents necessary for the certification reviews and the self-certification process. Maintain all Old Colony MPO documentation records, and files.
3. To ensure that there is equity in the distribution of transportation resources and that there is reasonable access to the planning process, OCPC will continually conduct Title VI and Environmental Justice planning for the Old Colony Region. The planning includes the following:
 - Evaluate the effectiveness of public participation plan for engaging transportation-disadvantaged communities in the transportation decision-making process.
 - Regional maps using the 2010 Census illustrating where high concentrations of minority and low-income persons are located.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

- Regional maps using the 2010 Census identifying where highway Transportation Improvement Projects are located in relation to minority population and low-income areas.
 - Regional maps using the 2010 Census illustrating the existing transit routes, fatal crash locations, pavement conditions, safe routes to schools buffers, and future capital transit projects.
 - Examination of mobility issues using the 2010 Census, access to jobs and services, and levels of service for both transit services and automobiles.
 - Analysis and documentation using the 2010 Census of project benefits and impacts.
 - Efforts to address those that are limited English proficient.
 - Analyze the outcomes of processes and plans by assessing the geographic distribution of the benefits and burdens of the regional transportation system to protected populations.
4. Review and comment on traffic studies submitted to member municipalities by developers under the Massachusetts Environmental Protection Agency (MEPA) process or as needed/requested for local permits. Review projects for consistency with the regional transportation goals and objectives, program consistency, etc.
 5. Provide for participation of staff in educational development programs and conferences with coordination of MassDOT, FHWA, FTA, BAT, GATRA, MBTA, and other agencies as needed.
 6. Provide inter-agency coordination with other transportation agencies, including MassDOT, FHWA, FTA, RPAs, MBTA, and RTAs on an ongoing, regular basis. Coordinate highway-planning activities with local officials and MassDOT District 5. Provide certification documents in accordance with the UZA Coordination MOU and participate in review and related update activities.
 7. Promote bicycle and pedestrian initiatives in the region. Coordinate activities within the MassDOT's bicycle and pedestrian planning efforts.
 8. Develop and maintain staff awareness of Intelligent Transportation System Technology, and promote Intelligent Transportation System solutions in the region and participate in the implementation of Intelligent Transportation System Architectures.
 9. Participate in the South Coast Rail Task Force for the New Bedford/Fall River Commuter Rail Restoration Project.
 10. Provide financial management of the transportation planning contracts with FHWA/ MassDOT, FTA/ MassDOT, Executive Office of Energy and Environmental Affairs, BAT, GATRA, and MBTA staff supervision and work assignment. Prepare applications, contracts, time sheets, progress reports, invoices, request forms, and perform other contract administration activities necessary to the conduct of the 3C Transportation Planning Process.
 11. Follow up on recommendations of previous transportation planning studies by attending and participating in public meetings or making presentation of study results.
 12. Coordinate planning activities within the Boston Urbanized Area (UZA) with MassDOT and the common MPOs, and seek to update the Boston UZA Coordination Memorandum of Understanding (MOU) to ensure that there are effective processes for cross-jurisdictional communication to improve collaboration, policy implementation, technology use, and performance management.
 13. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

Maintenance and federal certification of a viable 3C Transportation Planning Process and Old Colony MPO operation (ongoing); Input and Support Community Development and Environmental Planning (ongoing); Memorandums of Understanding; 2016 Old Colony Title VI Report; Information on MAP-21 and the Clean Air Act (CAA) as needed; Preparation for Certification Reviews and implementation of related recommendations; Inter-agency meetings, memorandum and correspondence on various aspects of the transportation planning program (ongoing); Updated and endorsed MOUs; CMAQ project solicitation and selection; Transportation Alternatives Program and project solicitation, selection and ranking; attendance and participation in Transportation Managers Group; and administration of contract needs.

SCHEDULE:

Management and support activities to be carried on a continuing basis throughout the program year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,000	\$10,000	\$4,444	\$1,111			\$55,556

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 1200 - UNIFIED PLANNING WORK PROGRAM (UPWP)

OBJECTIVE:

To develop, endorse and maintain an annual UPWP that provides a description of the overall transportation related planning activities that are ongoing and anticipated in the region, during the forthcoming year and including funding sources and agency responsibility. Endorsement of this document shall be consistent with the Public Participation Plan.

PREVIOUS WORK:

UPWPs prepared and endorsed annually by the Old Colony MPO; monthly invoices.

PROCEDURES:

1. Maintain the existing UPWP and prepare related invoicing. Review and adjust and/ or amend the UPWP when necessary and circulate revisions to the Old Colony MPO, Old Colony JTC, OCPC, and other appropriate agencies for review, adjustments, and/or endorsement, as appropriate.
2. Follow the Old Colony MPO endorsement process for major amendments. Other revisions to the Unified Planning Work Program, such as changes in the existing level of effort or funding of a specific task or the addition/deletion of a task and procedures within the current contract/grant programs, etc., will be made as required throughout the program year upon mutual agreement of the agencies involved. Such revisions/ adjustments will be conducted by the OCPC staff and distributed to the appropriate agencies, as appropriate. These revisions/adjustments do not require formal Old Colony MPO endorsement.
3. Develop the FFY 2017 UPWP for the Old Colony region covering the next program year. The UPWP will be developed in conformance with the latest federal and state regulations and guidelines. The UPWP describes transportation, air quality and transportation related planning activities anticipated within the region during the upcoming year. The staff will prepare the UPWP in coordination with the Old Colony JTC and submit it in draft version to OCPC, FHWA, FTA, MassDOT, BAT, and GATRA for review and comments. The Old Colony MPO will endorse the final document by August 2017.

PRODUCT:

Maintain the existing UPWP and prepare invoices; Prepare and submit Adjustments and Revisions, as needed; Prepare the FFY 2017 UPWP.

SCHEDULE:

FFY 2017 UPWP to be developed and endorsed by September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$9,600	\$2,400	\$1,067	\$267			\$13,333

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 1300 - PUBLIC PARTICIPATION PROGRAM

OBJECTIVE:

To continue to support and implement the Old Colony MPO's Public Participation Plan (PPP) that was developed and adopted in 1994, endorsed in 2007, amended in 2009, and updated in 2011. This process is designed to ensure that key public agencies at all levels of government, private and nonprofit organizations and interested citizens will be kept apprised of transportation planning milestones in the region. The encouragement of participation and provision of meaningful access to all local citizens in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. The Public Participation Plan is reviewed and updated as deemed appropriate.

To provide staff support and actively encourage public and private participation in the 3C planning process through the old Colony JTC, Old Colony MPO, and OCPC.

To continue monitoring the effectiveness of its public participation program. The process outlines the public outreach procedures that will be followed by the Old Colony MPO in developing and amending the Region's RTP and TIP.

To prepare, and ultimately obtain MPO endorsement of the 2016 PPP.

To conduct outreach activities related to the development of MAP-21 performances measures and targets.

PREVIOUS WORK:

Old Colony JTC Newsletters, OCPC Newsletters, Route 3 South Task Force; News Releases and Articles for the Media, OCPC Annual Reports, Old Colony JTC meetings, Old Colony Public Participation Plans, 2007, and 2012, Old Colony RTPs, TIPs and Implementation, Title VI Reports, and 2007 Public Participation Plan and 2009 PPP Amendment.

PROCEDURES:

1. Provide a proactive public involvement process that provides complete information, timely public notice, full public access to key decisions, and supports early and continuing involvement of the public in the developing Plans and Transportation Improvement Programs and other documents. Employ social media as a meaningful and effective communication medium.
2. Provide staff support and actively encourage public and private participation in the 3C planning process through the Old Colony Joint Transportation Committee including:
 - Host meetings of the Old Colony JTC and Old Colony MPO.
 - Work with the Old Colony JTC, working towards expanding and educating the membership. Modify and expand the Transportation Advisory Network (TAN) as appropriate.
 - Continue to maintain and update comprehensive mailing lists of interested groups, local, state, and federal agencies, Old Colony JTC, minority and low-income groups, and individuals who should be informed of regional plans, programs, and accomplishments in the area of comprehensive transportation and environmental planning and development.
 - Ensure early and continuing involvement of the public in the development of plans and other documents. Old Colony Planning Council shall utilize visualization techniques and will publish or announce the availability of plans and/or document for review and comments.
 - Continue to review and evaluate the effectiveness of the public participation plan; identify innovative public involvement techniques and/or programs that enhance public participation.
 - Continue to implement the public involvement process with particular emphasis on the RTP and the TIP. During the year, OCPC will continue to prepare mailings, newspaper announcements, public notices, and public service announcements, as outlined in Old Colony MPO's Public Involvement Process.
 - Continue to identify under-served and under-represented groups in the OCPC region, continue to make efforts to reach out, attempt to get them interested, and involved in the transportation planning process.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

OCPC will continue efforts to broaden public participation especially reaching out to the limited English proficient, minority, and low-income population groups.

- Provide staff support and actively encourage both public and private minority groups/agencies participation in the 3C planning process through the Old Colony JTC.
3. Prepare articles and documentation related to transportation planning including: Articles for OCPC Annual Report, newsletters, website, and other media outlets.
 4. Prepare news release and articles for the media for important activities that require immediate publicity.
 5. Continue to address Title VI and Environmental Justice as part of the public participation process and ensure that there is equity in the distribution of transportation resources in the Old Colony region. This process is designed to ensure that key public and private minority agencies, organizations, and interested citizens will be kept apprised of transportation planning milestones in the region. The encouragement of meaningful participation of local minority groups, organizations, and citizens in metropolitan transportation planning is one of the most important goals of the "3C" process (comprehensive, cooperative, and continuing).
 6. Present transportation plans and programs (e.g. Regional Transportation Plan, Transportation Improvement Program, Public Participation Plan, and Unified Planning Work Program) developed through the public and private participation process to the Old Colony MPO for appropriate action (endorsement as needed).
 7. Maintain, update existing PPP, and prepare 2016 PPP. OCPC will make sure that the interested parties and the public are involved in developing new outreach procedures and will have many opportunities to voice their opinions on these changes once proposed. Endorsement procedures will be conducted in a manner acceptable to the FHWA and FTA.
 8. Conduct outreach activities related to the development of MAP-21 performances measures.

PRODUCT:

Old Colony MPO meetings; Old Colony JTC meetings; Old Colony MPO documents; Old Colony JTC documents; Website Notices; Legal Notices; Articles in OCPC Annual Report and News Releases; Participation in public meetings; newsletters; outreach activities related to the development of MAP-21 performances measures maintenance of a viable Public Participation Process; 2016 Old Colony Title VI Report; Public Participation Plan amendments, and refinements for the website; 2016 Public Participation Plan.

SCHEDULE:

To be carried out throughout the program year. Publication of newsletters may be quarterly. 2016 Public Participation Plan to be completed by September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$37,600	\$9,400	\$4,178	\$1,044			\$52,222

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 1400 - TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

OBJECTIVE:

To develop and maintain a multi-year financially constrained staged program of transportation/air quality improvement projects that is consistent with the Old Colony MPO's RTP, the State Implementation Plan (SIP), the Environmental Protection Agency's Air Quality Conformity Regulations, and FHWA and FTA Planning Regulations. The TIP will include a program of highway and transit projects for FFY 2017-2020. Any project, which is to be implemented, using federal funding, must appear in this document and any project, which is to be implemented in the current fiscal year, must appear in the annual element.

The Old Colony MPO's FFY 2016-2019 TIP will be maintained and any future amendments to the TIP will be conducted in accordance with the PPP. The FFY 2017-2020 TIP will be developed and endorsed.

PREVIOUS WORK:

Transportation Improvement Programs have been developed and endorsed annually. Public Participation Process, Transportation Improvement Program Amendments & Administrative Modifications, Evaluation Criteria Analyses, GHG Tracking and Evaluations, Project Evaluations, Technical Assistance and formulation, implementation and coordination of TIP Subcommittee, and preparation of related products.

PROCEDURES:

1. Develop a program of projects: In developing the FFY 2017-2020 TIP, staff will update the list of all transit, highway, or air quality projects that are expected to require federal and state transportation funds for planning and engineering, construction or purchase during FFY 2017-2020. This work will include:
 - All transportation projects or programs that require FHWA or FTA approval that are not using Federal transportation funds.
 - For informational purposes, all projects to be funded with Federal funds other than those from FHWA or FTA
 - For informational purposes, all projects to be funded with Non-Federal Funds.
2. Include the following information in this multi-year list of projects: The MassDOT identification number; Project description; Transportation Evaluation Criteria Scores; Estimated total cost; Amount of federal funds proposed to be obligated during each program year; Proposed source of Federal and Non-Federal funds; Identification of the recipient/sub recipient and state and local agencies responsible for carrying out the project; Identification of those projects which are identified as Transportation Control Measures in the SIP. Project descriptions shall be of sufficient detail to permit air quality analysis in accordance with EPA conformity requirements. In addition, the total costs of projects seeking Federal funds in each program year shall be in line with anticipated Federal funds.
3. Prepare Draft FFY 2017-2020 TIP for the Old Colony Region: The following tasks and procedures will be performed by the OCPC transportation planning staff in developing the Draft FFY 2017-2020 TIP:
 - Early involvement of local legislators, chief local elected officials, and citizens through the public participation process.
 - Provide technical assistance to municipalities and private interests in developing projects and priorities.
 - Meet with communities, MassDOT District 5, MassDOT, and consultants in developing project information, and utilizing transportation evaluation criteria regularly.
 - Utilize transportation evaluation criteria.
4. The draft Transportation Improvement Program will also include sections relative to:
 - The relationship to the TIP to the RTP.
 - Funding categories and amounts of federal funding proposed to be obligated during each program year.
 - Previously funded projects, programs, and an explanation of any significant delays in the planned implementation of major projects.
 - A description of the transportation evaluation criteria and process for prioritizing projects.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

- Air quality significance and relationship of the TIP, STIP, and SIP.
 - A description of the progress in implementing required Transportation Control Measures, including reasons for any significant delays in the planned implementation and strategies for ensuring their advancement.
 - A financial plan that compares revenue needs to revenue sources for highway and transit programs.
5. Public Participation: There will be a reasonable opportunity for public comment on the Draft FFY 2017-2020 TIP in accordance with the Old Colony PPP. OCPC will hold at least one public meeting during the TIP development process and both the proposed and approved TIP will be published or otherwise made readily available for informational purposes via various media outlets, and website.
 6. TIP Endorsement: The completed document will be reviewed and endorsed by the Old Colony MPO, and once endorsed, will serve as the required air quality conformity documentation necessary for U.S. DOT and EPA conformity determinations.
 7. TIP Administrative Modifications/ Amendments: Amendments to the TIP will require Old Colony MPO endorsement. Administrative Modifications to the TIP typically require approval of the Old Colony JTC and notification of the Old Colony MPO.
 8. TIP Project Impact Before and After Evaluation to identify the effectiveness of selected TIP projects. Typically, for intersection improvement projects, intersection operations and safety will be evaluated using turning movement counts, operational performance measures, and crash data.
 9. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Maintenance of the FFY 2016-2019 TIP, and Administrative Modifications/ Amendments to the FFY 2016-2019 TIP as needed. FFY 2017-2020 TIP and, TIP Project Impact Before and After Evaluation.

SCHEDULE:

The FFY 2017-2020 TIP will be developed and endorsed by September 2016. TIP Project Impact Before and After Evaluation to be completed by September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$32,800	\$8,200	\$3,644	\$911			\$45,556

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 1500 – TITLE VI AND ENVIRONMENTAL JUSTICE

OBJECTIVE:

To ensure that there is equity in the distribution of transportation resources in the Old Colony region. Ensuring that the 3C planning process is accessible to all individuals, including members of the Title VI, Environmental Justice (EJ), and Limited English Proficiency (LEP) communities is a central federal, state, and regional priority. This process is designed to ensure that public and private minority agencies, organizations, and interested citizens will be kept apprised of and involved in the transportation planning milestones in the region. The encouragement of participation and provision of meaningful access to all local citizens in metropolitan transportation planning is one of the most important goals of the "3C" (continuing, cooperative, and comprehensive) process. The MPO process must engage these populations and reach out to them throughout all transportation planning related activities. As such, data collection and data analysis practices throughout the UPWP will reflect the needs of these populations.

PREVIOUS WORK:

Old Colony LEP Plan, Old Colony PPP, Old Colony JTC Newsletters, OCPC Newsletters, News Releases and Articles for the Media, OCPC Annual Reports, Website, Old Colony JTC meetings, Public Participation process (Old Colony 2016 RTP), Old Colony TIP and Implementation Process, Annual Old Colony Title VI Reports.

PROCEDURES:

1. Ensure that there is equity in the distribution of transportation resources and that there is reasonable access to the planning process, OCPC will continually conduct Title VI and Environmental Justice planning for the Old Colony Region. The planning includes the following:
 - Evaluate the effectiveness of public participation plan for engaging transportation-disadvantaged communities in the transportation decision-making process.
 - Regional maps using the 2010 Census illustrating where high concentrations of minority and low-income persons are located, where highway Transportation Improvement Projects are located in relation to minority population and low-income areas; and illustrating the existing transit routes, fatal crash locations, pavement conditions, safe routes to schools buffers, and future capital transit projects.
 - Examination of mobility issues using the 2010 Census, access to jobs and services, and levels of service for both transit services and automobiles.
 - Enhance staff capacity to engage those populations that are limited English proficient.
 - Analyze the outcomes of processes and plans by assessing the geographic distribution of the benefits and burdens of the regional transportation system to protected populations.
2. Provide staff support and actively encourage both public and private minority groups/agencies/community based organizations participation in the 3C planning process through the Old Colony Joint Transportation Committee.

PRODUCT:

Preparation of the Title VI/ Environmental Justice Plan for the Old Colony Region, and 2016 Title VI Report. Maintain an outreach contact list of minority groups and community based organizations, develop maps identifying minority and low-income populations, develop transit route maps, and develop maps showing existing and future location of Transportation Improvement Program and Transportation Plan projects. Conduct benefits, burden analysis, and include in TIP. Continue to expand outreach process and methods. Obtain and secure on-call interpreters. Utilization of MassDOT Title VI Tool.

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$32,000	\$8,000	\$3,556	\$889			\$44,444

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

2000 - DATA RECONNAISSANCE, ACQUISITION, AND ANALYSIS ACTIVITIES

A major requirement of planning is to know what is actually happening in the real world. Surveillance activities are designed to do just that by gathering data on transportation resources, their use, and demand for their use. This information is used to locate and define problems for further study and analysis, define requirements for plans and designs, develop programming priorities and evaluate the success of projects after implementation.

2100 - Demographic Surveillance and Road Inventory Update

2200 - Highway Data Surveillance and System Monitoring

2300 - System Planning Resource Activities

2400 - Geographic Information System (GIS)

2500 - Management Systems (Congestion, Land Use, Pavement & Safety), and Travel Demand Modeling

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 2100 - DEMOGRAPHIC SURVEILLANCE AND ROAD INVENTORY UPDATE

OBJECTIVE:

To continue to develop, update, and maintain current demographic information and data to ensure that transportation planning, programming analyses, and forecasting methods are based on the most current information. This includes analyzing social, economic, and land use data, including historic, current, and forecast information, and the development, update and revision of socioeconomic forecasts, and the update the road inventory for use in refinement of the regional transportation model and the RTP.

PREVIOUS WORK:

Population, employment, land use, building permits, build out analyses, Journey to Work data, forecasts, and GIS data analyses. Road Inventory Updates; Regional demographic data book preparations; US. Census Participant Statistical Areas Program (PSAP).

PROCEDURES:

1. Review and continue to maintain, update, and develop where appropriate existing demographic files based on the 2010 U.S. Census information.
 - Review, maintain and periodically update physical data and prepare data maps, including land use, zoning, etc.
 - Develop, update, and revise socioeconomic forecasts for use in refinement of the regional model, the Geographic Information System, and the Regional Transportation Plan.
 - Develop traffic analysis zones for the Transportation Model with the most recent census data, as it becomes available.
 - Review and analyze the 2010 U.S. Census Data and demographic data.
 - Provide and respond to requests for U.S. Census Data and demographic data.
 - Attend and participate in workshops and courses (US Census, CTPP, etc.) sponsored by Federal Highway Administration, Federal Transit Administration, Massachusetts Department of Transportation, Baystate Roads, and other agencies or groups.
2. Socio-Economic forecasting
 - Develop, update, and revise socioeconomic forecasts for use in refinement of the regional travel demand model.
 - Obtain the necessary information to revise the population and employment projections based on the 2010 U.S. Census.
3. Continue to collect and update attributes of the Massachusetts Department of Transportation's Road Inventory File that have not been updated:
 - Assist communities with the documentation needed in order to add newly constructed accepted streets or to change an existing street from unaccepted to an accepted roadway.
 - Meet with local officials to discuss the Road Inventory Data Files and the changes identified during the Pavement Management survey process.
 - Continue to maintain the Road Inventory on the Geographic Information System.
 - Investigate the feasibility of using a Global Positioning System to plot and update the Road inventory files with new roads created from new subdivision development. Additionally, OCPC will also use the Global Positioning System to plot both existing pedestrian and bicycling trails within the region.

PRODUCT:

Updated Socio-Economic Data Files; Updated Physical Data Files; Regional demographic databook; 1990-2010 Journey-to-Work data tables; Journey-to-Work Reports; assist with the 2010 U.S. Census; Priority Development Areas and Priority Preservation Areas; and, provide technical assistance and maintain and update Road Inventory Files.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$16,000	\$4,000	\$1,778	\$444			\$22,222

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 2200 - HIGHWAY DATA SURVEILLANCE AND SYSTEM MONITORING

OBJECTIVE:

To develop and maintain a region-wide traffic-monitoring program (includes OCPC Program and MassDOT). To respond to requests for traffic (vehicle, bicycle, and pedestrian) counts from state, city, and town officials within the region. To preserve up-to-date files of traffic-specific data characteristics of the highway system, demand, and its use. To conduct pedestrian and bicyclist counts.

PREVIOUS WORK:

Annual Old Colony Traffic Volume Reports. Maintenance of comprehensive computer file inventory of local, state and other traffic counts. Turning movement counts and Travel Time Studies. Collection and analysis of data previously performed for other Transportation Plans and Studies. Numerous speed and vehicle classification studies requested by member communities. Review of studies and reports prepared by agencies and consultants. Routine MassDOT/ RPA Traffic Count Program. In addition, a three-year count program of strategic road/locations within the region has been developed to provide information for implementation of the regional growth factors, model inputs, etc.

PROCEDURES:

1. Undertake a traffic counting program in coordination with municipal and MassDOT officials including:
 - Conduct traffic counts using mechanical recorders and conduct manual turning movement counts at the request of the municipalities within the region, and/or as needed for planning purposes.
 - Conduct directional traffic counts as part of MassDOT's Statewide Traffic Coverage Counts.
 - Conduct turning movement counts, as appropriate.
 - Conduct bicycle and pedestrian counts, as appropriate.
 - Verify and calibrate traffic counters according to MassDOT Procedures.
 - Prepare and report primary data collected to host municipalities and MassDOT.
 - Maintain and continue to expand on an ongoing region wide traffic count database for use in monitoring regional VMT growth rate.
 - Provide maintenance, payments, and replacements of all traffic counters, and traffic counting related equipment, as needed.
 - Purchase equipment and supplies as needed to continue the traffic count program.
 - Maintain interactive traffic count database.
 - Prepare and distribute reports summarizing the traffic counting activities in the region (includes distribution to MassDOT), as appropriate.
2. Conduct additional traffic (vehicle, bicycle, and pedestrian) counts throughout the region as needed in order to refine and update the traffic database for the Regional Transportation Model.
3. Undertake travel time and vehicle occupancy study in the Old Colony region as needed for the Regional Transportation Model, the RTP, and/or other planning activities.
4. Review, monitor and update the following highway systems data as needed including:
 - Average Daily Traffic growth trends and seasonal adjustments.
 - Commuter rail parking lots and park and ride facilities (inventory) and utilization study.
 - Traffic crash and crash rate documentation.
 - Traffic control devices.
 - 2010 U.S. Census Place of Work and Residence Data.

PRODUCT:

Traffic Counting Program; Highway Data Displays; speed and classification reports; Turning movement counts; MS2 Upload; Vehicle Occupancy and Travel Time Reports as needed and updated computer files of traffic counts on a community/ roadway basis and a data layer of regional counts with Geographic Information System and Commuter Rail Parking Lots and MassDOT Park and Ride Utilization documentation; and, the replacement, maintenance, and,

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

purchase of traffic counters, equipment, and software. Other products include Annual Traffic Volumes Report, traffic count interactive database, turning movement count interactive database, and traffic volume growth/decline rates.

SCHEDULE:

To be carried out typically from January to December (weather permitting). Year End Traffic Volume Report to be completed during spring 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,800	\$10,200					\$51,000

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 2300 - SYSTEM PLANNING AND RESOURCE ACTIVITIES
--

OBJECTIVE:

To continually improve the region's capability for estimating and evaluating impacts of existing and proposed regional transportation facilities and to provide support for the day to day operation of the OCPC Transportation Department's computer system and to expand the utility of the computers to other areas of transportation planning. Additionally, to provide for staff development, training, and their related participation in educational development programs, seminars, conferences, and courses.

PREVIOUS WORK:

Staff development and participation in courses, seminars, and workshops (on-going project). Use of TransCAD, Geographic Information System, HCS, Pavement Management, McTrans Highway Capacity Software, SYNCHRO, Pictometry, and other transportation analysis software package. Purchase, installation, and upgrade of computer systems, software, and equipment, as needed. Purchase of relevant reference materials and documents.

PROCEDURES:

1. Staff development, attendance and participation in transportation courses, seminars and workshops sponsored by MassDOT, FHWA, FTA, BAT, GATRA, EOEEA, DEP, EPA, and others. This will assist staff in continued and on going development, maintenance, and application, sketch planning, quick response and other forecasting methods. This will also encompass all activities that are directed to the production of new computer procedures that support OCPC analytical, administrative and documentation tasks.

2. Computer hardware and software acquisition, maintenance, and updates.
 - Purchase, update/upgrade, and maintenance of all hardware equipment/supplies and software applications that are needed for the Transportation Section's computer facilities.
 - Integrate computer capabilities into all practical aspects of the transportation planning process. This effort entails the acquisition, testing, and refinement of additional hardware and transportation related software from US DOT supported research and other public agencies as well as private companies.
 - Provide necessary support for the effective operation of the OCPC Transportation staff's computer facilities.
 - Monitor technological development in the field of computer hardware and software for potential use in planning activities. Continue ongoing planning, evaluation, and implementation of computer software and hardware.
 - Familiarize the Transportation Staff with the computer facilities and applications through informal and formal training sessions.
 - Continue to maintain and update the library of programs and data files.
 - Develop a database that will archive data from past projects and provide current GIS and tabular data in an online format searchable by the public.
 - Maintain website.

PRODUCT:

Staff development of enhanced technical and planning capabilities. Attend courses/workshops etc., maintain, and update website, computer hardware and software, and knowledge bases, as needed. Purchase of relevant software, reference materials, and documents. Application of new forecasting techniques and transportation analysis techniques.

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$30,400	\$7,600	\$3,378	\$844			\$42,222

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 2400 - GEOGRAPHIC INFORMATION SYSTEM (GIS)
--

OBJECTIVE:

To improve, develop, and utilize the digital data and geographic tools of the GIS, GPS, and Pictometry for various tasks within the UPWP. The GIS allows OCPC to store, display, manage, and analyze data for different work tasks. This includes land use projections for the RTP; road inventory files; travel demand modeling; traffic volume; high-crash locations; roadway functional classification; transit route analysis; and pavement management analysis. This task will also include collaboration with communities and regional organizations, and provide general technical assistance on geographic matters.

PREVIOUS WORK:

Roadway Classification; technical assistance program for member communities; regional crash database; regional land use map; regional growth map; regional build out analyses; Parcel Maps; Pictometry Installation and Technical Assistance; PDAs and PPAs; Crash Cluster Maps; Stormwater Maps; Developed Land as of 2009.

PROCEDURES:

1. Collect, maintain, and analyze data on an ongoing and continuing basis.
2. Train staff and enhance system abilities and develop regional databases.
3. Integration of existing databases such as road inventory, hydrology, and bicycle and pedestrian infrastructure into Geographic Information System.
4. Utilize GIS and GPS capabilities in maintaining traffic data, mapping pavement condition information, mapping existing and projected land use data for use in various transportation projects such as the revisions to the long range plan and special studies, road inventory; roadway functional classification; crash location analysis; travel demand model; and transit routes; etc.
5. Review and prepare Priority Development Areas and Priority Preservation Areas, as appropriate.
6. Enter relevant demographic, economic, environmental, stormwater, drainage, and traffic data into the GIS as needed to provide increased abilities for organization, analysis, and retrieval. Establish new database and map overlays on a continual basis as projects develop.
7. Continue the expansion of GIS and GPS technology from a mapping tool to an analytical tool through various project needs.
8. Develop and/or adapt, as appropriate, computer programs for various transportation-planning applications.
9. Develop the interactive capabilities of web-based GIS to serve communities.
10. Support Unified Planning Work Program tasks and special reports where appropriate and necessary.
11. Review, select, and purchase additional software and hardware as needed.
12. Provide GIS, Global Positioning System, and technical assistance to regional communities.

PRODUCT:

Base maps; overlay files, and photography that can be utilized for tasks including travel demand modeling, traffic counting program, management systems, road inventory; PDAs and PPAs; crash data processing; transit routing; plan updates; environmentally sensitive areas; data models for advanced geoprocessing; and traffic signal & intersection inventory.

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,800	\$10,200	\$4,533	\$1,133			\$56,667

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 2500 - MANAGEMENT SYSTEMS (CONGESTION, LAND USE, PAVEMENT, AND SAFETY), AND TRAVEL DEMAND MODELING

OBJECTIVE:

Congestion Management Process (CMP)

To continue to implement a congestion management process. Considered an ongoing effort, OCPC will continue to be responsible for providing the staff to collect and maintain all data needed in the estimation of refined performance measures while identifying both existing and future needs of the region's transportation system. Subsequently, ranked regional listing of congested highways, transit facilities, and park and ride parking facilities that have been established will continue to be refined. As part of this System, regional congestion will be addressed at locations identified in the 2016 Old Colony RTP.

Pavement Management System (PMS)

To continue to implement a pavement management system on a continual basis in keeping with objective driven, performance based planning. OCPC will continue to collect and analyze road surface data on federal aid eligible roadways, and update the PMS database on an ongoing basis. OCPC will also continue to assist and provide technical assistance to local communities interested in developing a local Pavement Management Program. OCPC will continue to maintain the Old Colony Pavement Management Program, as well as and provide technical assistance to local communities. OCPC will continue research in updating and/ or replacing the existing the pavement management system software with a state of the art system.

Land Use Management System (LUMS)

To continue to implement a land use management system, and to monitor the changes in local government land use plans and regulations, land use patterns, development projects, trip generations, on and off site mitigation, and the various associated land use characteristics of the region in order to update the land use and zonal forecasts, and to use as inputs into the congestion management process and mitigation activities.

Safety Management System (SMS)

To continue to implement a safety management system. This consists of a systematic process that has the goal of reducing the number of and severity of traffic crashes on the public roads. Recommended actions include providing information for selecting and implementing effective safety strategies and projects. All opportunities to improve roadway safety are identified, considered, and implemented in all phases of highway planning, design, construction, maintenance, and operation. The safety management system incorporates roadway, human, and vehicle safety elements. Considered an ongoing effort, OCPC will be responsible for providing the field survey staff to collect and maintain all data needed in the estimation of refined performance measures and the completion of road safety audits. Staff will identify both existing and future needs of the region's transportation system with regard to safety. Subsequently, this includes development of annual regional listings of high hazard intersections and corridors, participation and implementation of the Strategic Highway Safety Plan and the Highway Safety Improvement Program.

Travel Demand Modeling

To continue to develop staff capabilities in using the TransCAD Modeling System and provide assistance in the development of the Statewide Model. To continue refinement, calibration, development, maintenance, and application of the Old Colony Regional Travel Demand Model used in the development of the Regional Transportation Plan, and to continue refining and calibrating the transportation demand model to meet the forecasting requirements of federal transportation and air quality laws and regulations.

The regional transportation model is an effective and comprehensive way to forecast transportation needs for the next 20 years in the Old Colony region. The transportation model enables OCPC to forecast traffic impacts caused by population and economic growth, identify congestion growth areas on highways, impacts on travel patterns and estimate Vehicle Miles Traveled. The model is a valuable transportation tool in analyzing the transportation network and evaluating alternative solution to transportation problems.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

OCPC may hire a consultant to assist with model refinements, and will utilize the model in testing of the transportation alternatives as part of the refinement of the Regional Transportation Plan and traffic studies as appropriate. The model will also be used to assist in identifying future problem areas and in the development of strategies for the ongoing CMP. OCPC will utilize the model in testing of the transit alternatives as part of the refinement of the RTP and transit studies as appropriate.

OCPC will continue to work with the MassDOT in developing the statewide travel demand model as needed.

PREVIOUS WORK:

Congestion Management Process

Preparation of the Annual Report. Monitoring and analysis of the parking, transit, and roadway facilities. Link V/C Ratios as part of the regional traffic-counting program. Participation on the Congestion Management Technical Team, development of strategies, and corridor studies. During previous years, the staff defined a focused roadway network for the region. Data collection, consisting of numerous travel time runs was completed on roads identified as having existing congestion. In addition, ridership data were analyzed on Brockton Area Transit's routes. Staff also identified and analyzed the park and ride lots and commuter rail lots in the region. Identification of problematic bottleneck areas to be studied in detail.

Pavement Management System

Maintenance of a PMS on the federal aid eligible roadways miles in the region (approximately 642 miles); Preparation of the Annual Report; OCPC Report On Roadway Condition; Road Inventory Update; Technical assistance to local communities interested in Pavement Management Program; Pavement Management Subcommittee; PCI development for incorporation in transportation evaluation criteria, and formation coordination and implementation of Pavement Management Subcommittee, and related products; review of consultant proposals for updating and/ or replacing the pavement management system software; and, revise the PMS database to reflect changes in road classifications, and cost of materials for developing budgets.

Land Use Management System

Preparation of GIS mapping of top employers, residential densities, employment densities; zonal forecasts for regional transportation plans; journey to work-studies; Preparation of Annual Report; MEPA Analyses, and, origin-destination surveys.

Safety Management System

Participation in development of Highway Safety Improvement Program; Safety analyses as part of Transportation Evaluation Criteria application; Crash Rate processing; OCPC Top 100 High Hazard Intersections; Preparation of the Annual Report, and studies for communities warranting specific attention to highway safety, East Bridgewater Route 106 at Washington Street RSA, Halifax Route 36 at Oak Street RSA, Halifax Route 106 RSA, Brockton Route 123 at Manley Street and VA Hospital RSA, Route 28 at Route 106 RSA, Route 123 at Linwood and Lorraine RSA, Main Street Brockton RSA, West Elm Street Brockton RSA, and Route 28 at East/ West Spring Street RSA, Samoset Street Plymouth RSA, Nelson Street and Water Street Plymouth RSA, Route 27 Hanson RSA, Bay Road at Boulder Lane Stoughton/ Sharon RSA.

Travel Demand Modeling

The Regional Transportation Model was used as an analytical tool during the development of the RTP. OCPC utilized a regional traffic simulation model that encompasses every community in the region. During the past year staff has worked on refining the model to address specific deficiency detailed in the RTP. The model was used to identify and verify congested corridors/areas in the region for the CMP, Corridor Studies, and Major Bottleneck Identification Studies.

PROCEDURES:

Congestion Management Process

1. Continue to work with the CMP to identify and coordinate various work tasks and to ensure consistency with requirements of Transportation Management Areas. Staff will continue to attend meetings and training as

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

appropriate since they serve as a forum for the dissemination of data produced by the system and allow personnel from other RPAs to meet and share information on data collection, data sources, etc.

2. Continue to refine the established CMP network by utilizing the region-wide traffic simulation model to identify any additional facilities on which congestion exists or is predicted. Develop a system of performance measures and thresholds.
3. Continue to measure identified congestion on CMP corridors/ roadways/ transit/ pedestrian/ bicycle through a data collection and analysis effort, which includes, but is not limited to the following:
 - Conduct travel time, delay runs in each identified corridor, and collect traffic counts and turning movement count data, as appropriate.
 - Monitor, survey, and analyze usage at commuter parking lots throughout the region. Develop and monitor mobility and accessibility enhancement measures for the commuter parking lots within the region.
 - Extend and recalibrate the regional model for peak periods and travel time delay. Incorporate turning movement counts and phase specific signal timing information into the model.
 - Continue ongoing collection and analysis of fixed-route transit data. Also included in this process will be to conduct origin/ destination surveys of current transit ridership, walk to transit, and the development and utilization of condition measures and load factors.
 - Continue to identify, evaluate, and select strategies that address congestion, and provide administrative and technical support during the implementation of congestion management strategies.
 - Provide inputs to statewide and regional plans and transportation evaluation criteria for Transportation Improvement Programs.
 - Develop knowledge and skills, regarding the integration of goods movement. Meetings with stakeholders representing the freight community, in order to understand inefficiencies.
4. Continue to develop and refine congestion control strategies. Develop both general and corridor specific recommendations for relieving congestion on selected corridors.
5. Continue to evaluate performance measures that provide relevant and up-to-date information on the congestion status of transportation facilities.
6. Continue to identify transportation connectivity gaps in accessing essential services.
7. Continue ongoing assessment of the effectiveness of implemented strategies on alleviating congestion.
8. Continue ongoing monitoring and analyses that identify the underlying causes of congestion.
9. Provide analyses that consider non-traditional congestion management strategies (Transportation Demand Management, growth management, congestion pricing, traffic operational improvements, public transportation, and Intelligent Transportation System) to reduce transportation system congestion.
10. Provide in depth study of regional congestion at priority locations, and to identify potential locations for additional MassDOT Park and Ride Lots.

Land Use Management System

1. Continue an extensive land use review and future land use update. This will include a review with each jurisdiction regarding their existing and future land use projects. Work shall include developing an accurate depiction of existing land use, trip generation, and the capability for tracking land use changes.
2. Continue to review and comment on proposed and ongoing development projects, that includes, but is not limited to those undergoing the MEPA process.
3. Continue to develop and refine land use database and GIS mapping. Provide reports to committees such as the Old Colony JTC and Old Colony MPO.
4. Continue to develop concepts for concurrency management programs and development and infrastructure management tools.
5. Investigate the representation of land use in a simulation models such as UrbanSim, and Community Viz.

Pavement Management System

1. Continue to use the Road Manager software, and/or other software to maintain and update the Old Colony Pavement Management Program as needed. Pavement management data collection and analyses will be used to inform OCPC, JTC, and MPO of the regional costs associated with regional pavement conditions and needs. This information is to support the inclusion of pavement projects in the TIP and will aid in the development of

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

realistic estimates of costs to the Region, particularly while developing the RTP. OCPC will update the PMS database to reflect the expansion of the federal aid eligible mileage due to the reclassification of roads and inclusion of new member communities.

2. Develop factors based on the deterioration curve to adjust the Pavement Condition Index for roads that were not surveyed or improved in the last several years.
3. Provide technical assistance to member communities interested in the Pavement Management Program.
 - Initiate, coordinate, and develop pavement management programs for local communities.
 - The communities would be responsible for all data collection.
 - Local officials must commit to participate in the program on an on-going basis.
4. Meet with MassDOT, RPAs, Pavement Management Sub Committee, and PMUG to coordinate regional and statewide efforts and to compare programs and strategies for improvement of data collection, analysis, and assistance to local communities.
 - Stay informed of pavement and roadway improvement projects completed throughout the region.
5. Pavement Management Procedures:
 - Conduct windshield surveys to determine severity and extent of pavement distresses.
 - Train and monitor community personnel in conducting the windshield survey.
 - In-put data into pavement management program used by OCPC (Road Manager) or other software, as appropriate.
 - Use computer capabilities to provide conditions analysis and recommended repairs and costs, and reports to municipalities.
 - Provide follow-up technical assistance, as needed.
 - Train staff in use of pavement management software so that database and management program may be maintained and continued following completion of OCPC work efforts.
 - Develop a system of performance measures and thresholds.

Safety Management System

1. Develop and work with the SMS to identify and coordinate various work tasks, and prepare and participate in Road Safety Audits. Staff will continue to attend meetings (such as SHSP and TRCC, etc.), and training as appropriate since they serve as a forum for the dissemination of data produced by the system, and allow personnel from other RPAs to meet and share information on data collection, data sources, etc.
2. Review local and state crash data for intersections and corridors. In addition, OCPC will provide crash data processing, upon request, to assist local police departments in the identification of high locations. Calculation of crash rate (crashes per million entering vehicles and crashes per hundred million miles) and comparison to both State and District Averages will be conducted. For corridors, the crashes per lane mile and fatality per lane mile will be used.
3. Develop both site specific and generalized recommendations in order to address safety deficiencies. This will include recommendations regarding geometric, speed reductions, traffic calming techniques, vegetation clearing, signage consolidation, pavement markings, pedestrian ramps and crossings, roundabouts and signalizations, as appropriate. To supplement the recommendations development, staff will utilize the Manual on Uniform Traffic Control Devices, the MassDOT project Development and Design Guide Book, and the Governor's Highway Safety Bureau.
4. Incorporate safety criteria in the transportation evaluation process used in the development of the TIP. Project specific recommendations will be discussed with local, regional and state officials as appropriate, in order to address safety issues and concerns.
 - Provide administrative and technical support during the implementation of safety management strategies.
 - Continue ongoing Public Participation Program.
 - Provide safety inputs to statewide and regional plans and TIPs.
5. Continue to develop and refine safety strategies. Develop both general and corridor specific recommendations for addressing safety on selected corridors.
6. Develop a system of performance measures and thresholds, and document results of implemented safety measures. Such measures may include percent reduction in crash rate, percent reduction in the number of injury crashes, and percent reduction in crashes involving fatalities. Improve methods for compiling and

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

retrieving crash data through utilization of GIS and through the improvement of information sharing with local, state, and federal partners.

7. Staff will continue to measure identified safety at high hazard locations through a data collection effort, which includes, but is not limited to the following:
 - Conducting turning movement counts, vehicle volume studies, vehicle speed studies, vehicle classification studies and pedestrian studies.
 - Continue to identify, evaluate, and select strategies that address safety.
 - Update status of performance measures at locations where safety improvement have been implemented.

Travel Demand Modeling

1. During the program year, the products developed from the model, i.e. the existing and future year scenarios used for network analysis of air quality and travel demand will be reviewed, evaluated, and utilized as part of any changes/updates to the RTP and TIP.
2. Continue to refine and update the Old Colony travel demand model to include the block group demographic data from US Census 2010; contract with consultant as needed; this information will be used to calibrate the model (this may include utilizing consultants under contract).
3. Continue to collect/compile, update traffic count data, and adjust as necessary to refine the accuracy of the model.
4. Develop external zones from external stations on the fringe areas of the region to improve the calibration of the existing conditions as appropriate.
5. Utilize the refined and calibrated model for analyzing alternatives in the development and refinement of the Regional Transportation Plan and other transportation or corridor studies (this may include utilizing consultants under contract).
6. Analyze forecast information to identify deficiencies as required for the RTP and Air Quality Conformity. Evaluate improvement strategies. Incorporate findings in the RTP as appropriate.
7. Assist MassDOT in the preparation of statewide modeling efforts as needed. Integrate the 2010 Census block group data and MassDOT Road Inventories Files into TransCAD model for use with the statewide travel demand model.
8. Maintain and update (as needed) the network model developed for the Downtown Brockton area to evaluate the one-way system.
9. Continue work on developing the transit network model as appropriate.
10. Survey of Existing Services: Collect data on existing services provided by the MBTA, BAT, and GATRA. This data collection will include route and service information provided by the respective transit providers as appropriate.
11. Survey of Existing Needs: Collect data on need for transit services across region. Data will be collected using a variety of techniques such as ridership surveys origin/destination, license plate surveys, and mode split analysis as appropriate.

PRODUCT:

Congestion Management Process

Annual Management System Reporting will be prepared. Data collection, intersection data survey, roadway refinement, proposal strategies, progress report preparation, and congestion management team support. In-depth study of regional congestion at priority locations. Consistency with CMP requirement of Transportation Management Areas. Transportation Evaluation Criteria inputs. Locations for expansion of existing Park and Ride Lots. Locations for additional Park and Ride Lots. Establishment of Performances Measures and thresholds. Measures to reduce greenhouse gas emissions, VMT, and congestion.

Land Use Management System

Annual Management System Reporting will be prepared. Updated Land use database and related mapping, and zoning and land use recommendations. Ongoing review and comment on proposed and ongoing development projects, that include, but are not limited to those undergoing the MEPA process. Development of concepts for concurrency management programs and development/ infrastructure management tools.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

Pavement Management System

Annual Management System Reporting will be prepared. Continue data collection, analysis, and cost estimates for federal aid eligible roadways in the region and use of said data in evaluation of projects to be programmed in the TIP; Database refinement and information for incorporation into GIS; operations and maintenance cost to maintain the federal aid roadway network; technical assistance to local communities; and, Establishment of Performances Measures and Thresholds, and Transportation Evaluation Criteria inputs.

Safety Management System

Annual Management System Reporting will be prepared. Road Safety Audits. Top 100 High Hazard Intersections in Old Colony Region. Identification of data collection, intersection data survey, roadway refinement, proposal strategies, and progress report preparation. Development of specific-safety recommendations for intersections, corridors, and pedestrian crossings. Inclusion of safety analyses as a component of the Transportation Evaluation Criteria in the development of the TIP. Establishment of Performances Measures and Thresholds. Identification of safety specific projects for the Old Colony Region.

Travel Demand Modeling

A completed refined/recalibrated transportation model for the Old Colony region that can be expanded upon as needed, utilized for travel demand estimation, and forecasting. Updated network models for the Old Colony region, and refinement of the Traffic Analysis Zones.

SCHEDULE:

Management Systems and processes, and travel demand modeling to be carried out throughout the year. Annual Reports, Road Safety Audits, and analyses to be completed by end of September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$38,400	\$9,600	\$12,800	\$3,200			\$64,000

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

3000 - SHORT AND LONG RANGE TRANSPORTATION PLANNING ACTIVITIES

Element 3000 charts the direction for major transportation development activities in the region. As such, it is concerned with continuously updating projects dealing with the demand for transportation; development of a transportation plan which encompasses a Long Range Element and a Short-Range Element, both incorporating the concept of Transportation Systems Management; a further detailing of the broad findings and recommendations of the Plan in plan refinement; and special purpose plans addressing such items as air quality, energy and the elderly and individuals with disabilities.

3100 - Regional Traffic Studies, ITS, and Intermodal Planning

3200 - Local Highway Transportation Technical Assistance

3300 - Duxbury Route 3A Corridor Study

3400 - Brockton Route 28 Corridor Study

3500 - MAP-21 Performance Management

3600 - Bicycle and Pedestrian Connectivity and Safety Study

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3100 - REGIONAL TRAFFIC STUDIES, ITS, AND INTERMODAL PLANNING

OBJECTIVE:

To provide planning services for highway, transit projects, and movement of goods in the region designed to address immediate traffic and safety problems, and to conduct Intelligent Transportation Systems (ITS) planning. The RTP identifies deficiencies in the region's transportation network. The deficiencies are shown in the plan including deficient bridges, dangerous intersections, congested highway corridors, and overcrowded transit facilities. Where projects have not been developed to correct these deficiencies, studies and intermodal planning will have to be undertaken to evaluate each problem in detail and to recommend the appropriate solution.

To provide a comprehensive inventory of roadway facilities that interact with the regional hydrologic network, including the condition, type, location, function, surrounding conditions, and environmental attributes of these facilities. Forthcoming EPA Phase II Stormwater Regulations will require communities to locate and map their roadway stormwater infrastructure. To update an assessment of vulnerabilities and risks that climate change, and/or extreme weather event pose to critical transportation infrastructure.

OCPC will conduct traffic studies and intermodal planning to assist member communities and agencies in developing the appropriate solutions for any identified local transportation deficiencies. OCPC also anticipates undertaking traffic studies at selected intersections and along selected roadway corridors identified in the Old Colony RTP or as part of the CMP, as warranting further study. Continually, OCPC receives requests from communities to conduct traffic studies. For example, in the past, the town of Whitman requested that OCPC conduct a traffic study on Route 18 and the Whitman Town Center, and the town of Stoughton requested a circulation study in Stoughton center.

PREVIOUS WORK:

2011 Major Bottleneck Study (Plymouth Route 3 at Exit 6, East Bridgewater Central Square, and West Bridgewater Route 106); 2012 Major Bottleneck Study (Bridgewater Route 104 and Stoughton Route 138); 2013 Major Bottleneck Study (Stoughton Central Street and Avon Harrison Boulevard); 2014 Southwest Brockton Corridor Study; 2014 Regional Freight and Goods Movement Study; Route 58 Corridor Study; Route 139 Corridor Study; Stoughton Square By-Pass Study; Stoughton Square Origin – Destination Study; Bridgewater Center Circulation Study; Bourne Road Corridor Study; 2013 participation in development Regional Intelligent Transportation System Architecture for the Metro Boston Area and Southeastern Massachusetts Area; 2007 Old Colony ITS Plan; Safe Route to School (SRTS) Technical Assistance; South Coast Rail Technical Assistance; Climate Change Transportation Impact Study; Climate Change Roadway Drainage and Runoff Program; Avon and Halifax Stormwater Management System Mapping and Database.

PROCEDURES:

1. The following is a list of potential projects, among others, that could be undertaken as part of this task:
 - Before and After Route 44 Study
 - Bicycle and Pedestrian Planning, Levels of Service and Education
 - City/town center circulation studies
 - Climate change adaptation strategies to enable the region to implement improvements
 - Complete Streets Technical Assistance
 - Crash and Safety Studies
 - Development knowledge and skills, regarding the integration of goods movement
 - Follow-up studies to the Congestion, Land Use, Pavement, and Safety Management Systems
 - Freight/ Plan Study
 - Geographic analyses and attribute analysis of drainage facilities that includes capacity and adequacy structures with regard to extreme weather events and climate change
 - Identification and demarcation of roadway drainage and stormwater management systems
 - Identify transportation connectivity gaps in accessing essential services
 - Intermodal Connector Analysis (Intermodal interfaces examined for identification of necessary improvements)

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

- Inventory of critical infrastructure vulnerable to extreme weather events and climate change
 - Main Street Brockton Corridor Study
 - Meetings with stakeholders representing the freight community, in order to understand inefficiencies. Intersection Sub-area Studies
 - Regional Casino/ Gaming Impact Study
 - Regional Intersection Study
 - Regional ITS Architecture Plan
 - Route 123 Corridor Study
 - Route 18 Corridor Study
 - Safe Routes to School (SRTS) Technical Assistance
 - Various corridor-wide traffic studies and Sub-area Traffic Studies
2. Efforts will include undertaking transportation studies at locations and developing specific reports as products for intermodal connectors as requested by local communities, FHWA, FTA, and/or MassDOT. OCPC will work with community officials, MassDOT, and MassDOT District 5, and stakeholders to develop a scope of service for the proposed study.
 3. For each corridor study, staff will prepare a draft report, which outlines the Study's findings and recommendations. This report will be circulated to for review and comment. These comments will be incorporated into a final report. The findings and recommendations contained in the final report will serve as the basis for including projects in the region's TIP and RTP.
 4. For ITS, activities to include: Promote the implementation of Intelligent Transportation System solutions to regional transportation problems; Work with MassDOT, SRPEDD, BAT, MBTA, and Cape Cod on implementing and refining Intelligent Transportation System Architectures for Southeastern Massachusetts and the Metro Boston Area; Complete Old Colony Intelligent Transportation System Plan; Compile available information, studies, and reports on Intelligent Transportation System strategies for the Old Colony Region.
 5. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Intermodal Connector Analyses and Recommendations Report; South Coast Rail Technical Assistance; Studies to identify solutions to traffic congestion and safety deficiencies on roadways within the region; Livability Measures; Performance Measures; Walk to Transit Analysis; Regional ITS Architecture Plan; Safe Routes to School Technical Assistance; Bicycle and Pedestrian Planning, Levels of Service and Education; Participation in refinements to Regional Intelligent Transportation System Architecture for the Metro Boston Area and development of Southeastern Massachusetts Area Regional Intelligent Transportation System Architecture. Included in these reports/ documents will be data, analysis and improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate; Climate Change Roadway Drainage and Runoff Report with recommendations for consideration for future implementation; Inventory of critical infrastructure vulnerable to extreme weather events and climate change; Stormwater management system mapping; Climate Change Adaptation.

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,000	\$10,000	\$4,444	\$1,111			\$55,556

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3200 - LOCAL HIGHWAY TRANSPORTATION PLANNING TECHNICAL ASSISTANCE

OBJECTIVE:

To provide a rapid and effective response mechanism to address special, short-term transportation issues and/or projects as they arise. This will include the development, upon request from local communities, regional authorities, state agencies, and federal agencies, of detail technical data and analyses and reports that will assist local communities and MassDOT in improving the region's transportation infrastructure.

PREVIOUS WORK:

Numerous Vehicle and Speed Classification Studies requested by OCPC communities; Route 123/Linwood/Lorraine/ VA Hospital/ and Manley Streets Intersection analysis in Brockton; Washington Street (Route 138) and Elm Street Intersection Study in Easton; Route 138 and Route 106 Intersection Study in Easton; Foundry Street (Route 106) and Prospect Street Intersection Traffic Study in Easton; Heavy Vehicle Exclusion Study in Pembroke; Elm Street and Furnace Street in Halifax; Long Pond Road Speed Study in Plymouth; Kingston Pembroke Street School Zone Analyses; Plymouth Chiltonville Traffic Calming Study; Esta and Kristin Road in Plymouth; West Bridgewater Route 106 at Howard Street Traffic Study; Brockton Main Street RSA; Kingston Cranberry Road Traffic Study; Kingston Smith's Lane Traffic Study; Kingston Landing Road RSA; Pembroke Mattakeesett Traffic Study; Pembroke and Duxbury Heavy Vehicle Pattern Study; Halifax Route 36 at Oak Street Safety Study; West Bridgewater South Street Safety Study; Plymouth Complete Streets Policy; Plymouth Safe Routes to School Study; Stoughton Hansen School Circulation Study; East Bridgewater Summer Street at Belmont Street RSA; Pembroke Route 53 at Route 139 Traffic Study; Samoset Street Plymouth RSA, Nelson Street and Water Street Plymouth RSA, Route 27 Hanson RSA, Bay Road at Boulder Lane Stoughton/ Sharon RSA, Summer Street Easton Study, Pembroke Plain Street and Lake Street Study, Plymouth Standish at Alden Street Study, Plymouth Standish at Cherry Street Study, Abington Hancock Street at Chestnut Street RSA, and, numerous other intersections warrant analysis, sight distance and crash analysis, traffic impact studies of land use, speed and vehicle classification studies.

PROCEDURES:

1. Provide technical planning assistance to communities on highway, pedestrian, and bicycle transportation planning related matters in the form of meetings, data, analyses, and reports to communities, Massachusetts Department of Transportation, and other local, state and federal agencies as the need arises. The OCPC staff shall perform work on specific short-range highway planning tasks including but not limited to: Intersection and capacity analysis; Road Safety Audits; SYNCHRO analysis; walk to transit analysis; crash analysis; air quality analysis, both commuter and municipal parking analysis; carpool/vanpool analysis; trip generation estimation analysis, sight distance analysis, traffic impact analysis of proposed developments, traffic analysis studies, GIS, GPS, and Pictometry applications; and other short-range studies to determine the need for traffic signals, traffic signs, traffic markings and the use of one-way streets.

2. Maintain an up-to-date file of the Crash Data for communities. Continue the collecting and reporting of crash statistics for communities.

PRODUCT:

Local Technical Assistance Reports/ documents will be prepared. Included in these reports/ documents will be data, analyses and improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate. Technical assistance to member communities and crash reporting for participating communities will be provided.

SCHEDULE:

To be carried out throughout the program year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$41,771	\$10,443					\$52,214

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3300 – AVON AND BROCKTON ROUTE 28 CORRIDOR STUDY

OBJECTIVE:

To identify, quantify, study in depth, the Route 28 Corridor in Avon and Brockton along Route 28 from the Avon/Randolph Town Line in the north to the Brockton City Line/ West Bridgewater Town Line in the south area and develop short term and long-term actions to be undertaken that will enhance circulation and traffic flow efficiency, improve safety, improve bicycle and pedestrian accommodation, and reduce gaps to essential services. Addressing and alleviating this congestion in this area system would enhance the movement of people and goods. Staff will review volume to capacity ratios, level of services, crash analyses, and public input as part of the identification process. In addition, staff will utilize the congestion management process and safety management system to assist the identification and the development of the short and long-term recommendations.

PREVIOUS WORK:

Congestion Management Process; Regional Traffic Count Program; Level of Service Analyses; Regional Corridor Studies; Access Management Plan; RTPs; 2011 Major Bottleneck Identification Study; 2011 Major Bottleneck In Depth Analysis Study; and, 2012 Major Bottleneck In Depth Analysis Study; 2013 Major Bottleneck In Depth Analysis Study; Southwest Brockton Corridor Study.

PROCEDURES:

1. Documentation of Existing Conditions: Develop documentation of existing condition thought in depth analysis for study area. The process shall utilize the CMP, SMS, LUMS, the 2016 RTP, Regional Travel Demand Models, Travel Time Studies, and Corridor Studies. All relevant and attainable data will be collected and reported during this phase of the project. Data, such as, average daily traffic, peak period volumes, and levels of service, crashes rates, trip generators, land uses, on locations will be catalogues, summarized and ranked. Included in the study will be traffic flow and safety analyses of the corridor intersections and segments that may be impacted by motorists travelling from/ through the east side of Brockton to a potential regional casino. The data compiled for the existing conditions will be tested to document the deficiencies along the facilities, and to identify their causes and their impact on traffic flow, and accessibility. This section will validate or disprove current perceived problems within the study area.
2. Short Term and Long Term Improvements Development: Various alternatives for mitigation or alleviation will be developed specific to problems identified in the critical areas. These alternatives will include recommendations that are cost effective as well as recommendations that will produce the closest to ideal conditions. Consideration will be given to operations and maintenance techniques, the incidental and routine causes of congestion, and access management. The promotion of efficient system management and operations is one of the MAP-21 planning factors seeking to integrate this concept in the existing planning process.
3. Prepare Conclusions and Recommendations: The product of this Task is a Plan that provides a framework for the alleviation traffic congestion and improve safety throughout the corridor, and to provide the necessary information for the stakeholders to move projects forward in the initiation phases. OCPC will prepare a final plan, which will include an implementation program that will outline how and when recommendations of the plan will be implemented and identify potential funding sources. A short-range plan will be recommended for immediate implementation, and a long-range plan will serve as the basis for including projects in the region's TIPs, and RTPs, and beyond.

PRODUCT:

Preparation of the Avon and Brockton Route 28 Corridor Study, which will include conclusions and recommendations. Included in study will be data, analysis, traffic flow and safety improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate.

SCHEDULE:

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

To be carried out throughout the year and completed by the end of September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$42,400	\$10,600	\$4,711	\$1,178			\$58,889

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3400 - DUXBURY ROUTE 3A CORRIDOR STUDY

OBJECTIVE:

To identify, quantify, study in depth, the Route 3A Corridor in Duxbury from the Marshfield Town Line in the north to the Kingston Town Line in the south area and develop short term and long-term actions to be undertaken that will enhance circulation and traffic flow efficiency, improve safety, improve bicycle and pedestrian accommodation, and reduce gaps to essential services. Addressing and alleviating this congestion in this area system would enhance the movement of people and goods. Staff will review volume to capacity ratios, level of services, crash analyses, and public input as part of the identification process. In addition, staff will utilize the congestion management process and safety management system to assist the identification and the development of the short and long-term recommendations.

PREVIOUS WORK:

Congestion Management Process; Regional Traffic Count Program; Level of Service Analyses; Regional Corridor Studies; Access Management Plan; RTPs; 2011 Major Bottleneck Identification Study; 2011 Major Bottleneck In Depth Analysis Study; and, 2012 Major Bottleneck In Depth Analysis Study; 2013 Major Bottleneck In Depth Analysis Study.

PROCEDURES:

1. Documentation of Existing Conditions: Develop documentation of existing condition thought in depth analysis for study area. The process shall utilize the CMP, SMS, LUMS, the 2016 RTP, Regional Travel Demand Models, Travel Time Studies, and Corridor Studies. All relevant and attainable data will be collected and reported during this phase of the project. Data, such as, average daily traffic, peak period volumes, and levels of service, crashes rates, trip generators, land uses, on locations will be catalogues, summarized and ranked. The data compiled for the existing conditions will be tested to document the deficiencies along the facilities, and to identify their causes and their impact on traffic flow, and accessibility. This section will validate or disprove current perceived problems within the study area.
2. Short Term and Long Term Improvements Development: Various alternatives for mitigation or alleviation will be developed specific to problems identified in the critical areas. These alternatives will include recommendations that are cost effective as well as recommendations that will produce the closest to ideal conditions. Consideration will be given to operations and maintenance techniques, the incidental and routine causes of congestion, and access management. The promotion of efficient system management and operations is one of the MAP-21 planning factors seeking to integrate this concept in the existing planning process.
3. Prepare Conclusions and Recommendations: The product of this Task is a Plan that provides a framework for the alleviation traffic congestion and improve safety throughout the corridor, and to provide the necessary information for the stakeholders to move projects forward in the initiation phases. OCPC will prepare a final plan, which will include an implementation program that will outline how and when recommendations of the plan will be implemented and identify potential funding sources. A short-range plan will be recommended for immediate implementation, and a long-range plan will serve as the basis for including projects in the region's TIPs, and RTPs, and beyond.

PRODUCT:

Preparation of the Duxbury Route 3A Corridor Study, which will include conclusions and recommendations. Included in study will be data, analysis, traffic flow and safety improvement recommendations (location improvements, speed zoning, heavy vehicle exclusions, etc.) for implementation, and inclusion in MassDOT Project Information Forms, as appropriate.

SCHEDULE:

To be carried out throughout the year and completed by the end of September 2016.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$42,000	\$10,500	\$4,667	\$1,167			\$58,333

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3500 - MAP-21 PERFORMANCE MANAGEMENT

The cornerstone of MAP-21's program transformations is the transition to a performance based outcome program. States and regions will invest in projects to achieve individual targets that collectively will make progress towards national goals. Therefore, the objective is to develop performance measures and targets for the Old Colony Region for utilization in the planning process and inclusion in the Regional Transportation Plan.

MAP-21 established national performance goals for the Federal highway programs:

- Safety – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Infrastructure condition (pavement and bridge) – To maintain a highway infrastructure asset system in a state of good repair
- Congestion reduction- To achieve a significant reduction in congestion on the NHS
- System reliability – To improve the efficiency of the surface transportation system
- Freight movement and economic vitality – To improve the nation freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- Environmental sustainability – To enhance the performance of the transportation system while protecting and enhancing the natural environment
- Reduced project delivery delays – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

This will include working with MassDOT, FHWA, and FTA to establish thresholds for performance measures or goals that meet state and national criteria. The objective of performance measures are to insure that investments in future transportation improvements effectively address transportation issues, are cost effective, and are implemented in a timely manner. The ultimate goal will be to develop projects that relieve congestion, improve safety, provide efficient alternative travel choices, preserve and maintain the existing system, promote economic development and protect the environment. This effort will coordinate information and studies developed in other planning tasks such as, but not limited to Congestion Management, Safety Management, Pavement Management, and ITS/Freight/Intermodal Planning.

PREVIOUS WORK:

Regional Transportation Plan, Regional Policy Plan, Congestion Management Process, Land Use Management System, Safety Management System, Pavement Management Systems, Road Safety Audits.

PROCEDURES:

1. Establish and refine performance measures and thresholds for pavement conditions and performance of the federal aid network, bridge conditions, injuries, and fatalities, traffic congestion. The federal rulemaking process will establish performance measures for each of these items. As such, this does not preclude the region from establishing additional measures for use locally, and the Old Colony MPO will continue to review the supplement the performances measures developed and included in the 2016 Regional Transportation Plan. Using information collected annually through other tasks outlined in this document, implement, and maintain a comprehensive strategy to evaluate the effectiveness of transportation improvements throughout the region.
2. Determine and set performance measures and thresholds in support of the performance measures and describe how program and project selection will help achieve the targets. With acceptable thresholds or targets for performance measures, staff will continue to maintain relevant data for safety, pavement, and congestion management and provide comparison analyses before and after the implementation of projects.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

3. Utilize INVEST TOOL - Projects will also be potentially evaluated on their sustainability through the FHWA web-based tool known as Infrastructure Voluntary Evaluation Sustainability Tool (INVEST). Although voluntary, this information will be useful to determine the long-term effectiveness of improvement projects.
4. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Development and refinement of MAP-21 Performance Measures and thresholds for the Old Colony Region

SCHEDULE:

To be carried out throughout the year and completed by the end of September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$24,000	\$6,000	\$2,667	\$667			\$33,333

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 3600 - BICYCLE AND PEDESTRIAN CONNECTIVITY AND SAFETY STUDY

OBJECTIVE:

To provide an analysis of the bicycle, pedestrian, and transit network within a connectivity, public health, and safety context. To prioritize planning activities that supports the development of the Bay State Greenway. OCPC will prepare the Bicycle and Pedestrian Connectivity and Safety Plan will seek to improve the connectivity safety of the bicycle and pedestrian network. Additionally, OCPC will work on development of projects that can be advanced by communities into the MassDOT Highway Division project development process for funding with statewide funding resources. The process includes collecting data through bicycle level of service (BLOS), pedestrian level of service (PLOS), MassDOT crash clusters, and intersection analysis. The data inventory will be developed in village centers, downtowns, and in proximity to schools, transit and commuter facilities, and community facilities and assist in the determination of measurements of safety.

PREVIOUS WORK:

Regional Bicycle and Pedestrian Plan, Congestion Management Process; Safety Management System; Regional Traffic Studies; Local Technical Assistance Studies; Bicycle and Pedestrian Task Force; Bicycle and Pedestrian Connectivity and Livability Study; Regional Transportation Plan; Corridor Studies.

PROCEDURES:

1. Existing Conditions and Problem Identification

All relevant and attainable data will be collected and reported during this phase of the project. Relevant data to the project will include any data that has an impact on current conditions, levels of service, and safety in village centers, downtowns, and in proximity to schools, transit and commuter facilities, and other community facilities. Data collection techniques to be utilized during this phase will include but are not limited to automated traffic counts, turning movement counts, windshield surveys, survey of land use maps, ADA accommodations review, and analysis of crash data, and travel time studies. The data compiled for the existing conditions will be tested to document the deficiencies along the highways, transit links, pedestrian and bicycle facilities, and to identify their causes and their impact on bicycle and pedestrian connectivity and flow, safety, and accessibility. Given the multiple HSIP eligible crash clusters along Main Street in Brockton, included in the procedures will the review and determination if the one-way vehicular pattern on Main Street north of Belmont Street is a factor in the two large bicycle crash clusters in the area. This section will validate or disprove current perceived problems within the study area.

2. Identify critical sidewalk gaps in the region and assist communities in utilizing any available regional TIP funds to connect gaps along federally aided roadways.

3. Forecast Conditions and Future Problems

Traffic volumes, pedestrian volumes, population, area employment, turning movements, and other factors affecting travel may be forecasted to determine the future conditions and performance of the system if no action is taken. Reviewing past trends and comparing them to the current conditions will complete forecasts. Problems will be examined to determine the effects forecasted traffic conditions will have on them. Areas that are not currently identified as traffic problem areas, but considered borderline, will be examined in order to determine if future operations will be below acceptable levels.

4. Alternatives Development

Various alternatives for mitigation will be developed specific to problems identified in the study areas. These alternatives will include recommendations that are cost effective as well as recommendations that will produce the closest to ideal conditions. The work completed under this task is the development of various plans to improve bicycle and pedestrian connectivity, levels of service, and safety. The work will also include the investigation of the feasibility of developing a bicycle route through downtown Brockton that could circumvent the existing bicycle and pedestrian safety issues around the Main Street/ Downtown Area.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

5. Conduct development of projects that can be advanced by communities into the MassDOT Highway Division project development process for funding with statewide funding resources.
6. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.
7. Support planning activities associated with a recommended opportunity to continue the Old Colony Bicycle Parking Program through the Transportation Improvement Program (TIP) with available regional CMAQ funds.
8. Prepare Conclusions and Recommendations
The product is a study with recommendations for implementation that provide a framework for the alleviation traffic congestion and improvement of safety for bicycles and pedestrians on the local and numbered routes, and to provide information for the stakeholders to move projects forward in the initiation phases. A report will include program that will outline how and when recommendations of the plan will be implemented and identify potential funding sources.

PRODUCT:

Preparation of Bicycle and Pedestrian Connectivity and Safety Study that will identify areas in need of connectivity and safety improvements and will include recommendations for consideration for implementation.

PRODUCT:

Development of Bicycle and Pedestrian Connectivity and Safety Study

SCHEDULE:

To be carried out throughout the year and completed by the end of September 2016.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
\$40,800	\$10,200	\$4,533	\$1,133			\$56,667

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

4000 - OTHER TRANSPORTATION TECHNICAL ACTIVITIES, PLANNING STAFF, FUNDING SOURCES, BUDGETS, AND TASKS

In the course of conducting transportation and transportation related planning activities, it is often the case that certain activities are called for which do not fit into the existing work program elements. When this is the case, those activities are programmed under the element heading of Other Transportation Technical Activities, Planning Staff, Funding Sources, Budgets, and Tasks.

4100 - Transit Technical Assistance, and Elderly and Individuals with Disabilities Support

4200 - BAT Planning and Technical Studies

4300 - South Coast Rail Technical Assistance

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 4100 - TRANSIT TECHNICAL ASSISTANCE, AND ELDERLY AND INDIVIDUALS WITH DISABILITIES SUPPORT AND ASSISTANCE

OBJECTIVE:

To respond to short-range transit planning needs upon request from communities, BAT, GATRA, MassDOT, and MBTA. To maintain an understanding of the region's transit system in order to provide an accurate basis for future forecasting, planning and program analysis, and project evaluation. To maintain and update the Old Colony Human Service Coordination Plan, and to conduct Community Transit Grant solicitations, reviews, rankings, and related coordination. To maintain and operate a Congestion Management Process.

To ensure the accessibility to public transit services for the elderly and individuals with disabilities. To attend meetings of the elderly and disability committees. To provide technical assistance to BAT, GATRA, region's municipalities, human service agencies, Councils on Aging, private non-profit agencies, and other parties involved in meeting special transportation needs. To maintain and update the Old Colony Human Service Coordination Plan, and to conduct annual Community Transit Grant solicitations, reviews, rankings, and related coordination.

PREVIOUS WORK:

BAT Comprehensive Regional Transit Plan; BAT - Fare Elasticity Study; Fixed Route Ridership Analyses; Title VI Studies; Air quality analysis for CMAQ and Transportation Demand Management proposals; Rockland Transit Feasibility Study; System Time Study; Route 2A Analysis; Abington Transportation Study; Paratransit Expansion; Regional Coordinating Committee participation; and Human Services Coordination Plan.

GATRA - Ridership analysis; Human Services Coordination Plan.

Other - Assisted Communities, COAs and other public and private agencies with the Section 5310, 5317, and MAP; Transit Directories; RTA Fare Comparison; Queset Commons Transit Study, Rockland Transit Study; Community Transit Grant solicitations, reviews, rankings, and related coordination.

Elderly and Individuals with Disabilities Neighborhood Sourcebook; Technical assistance to public and private non-profit organizations in preparing Federal Transit Administration applications for Section 5310, Section 5317, and Mobility Assistance; Regional map of the OCPC area showing the locations with high density of elderly population (60+); Compilation of 2000 and US Census data of elderly population; BAT Route Ridership Analysis; BAT Title VI Study; Brockton Area Transit Fare Elasticity Study; Air quality analysis for CMAQ proposals; Abington Transportation Study; Human Services Coordination Plan.

PROCEDURES:

1. Provide technical planning assistance to transit providers and member communities on transit matters. This assistance may take the form of assistance in meeting federal reporting requirements; in assessing and evaluating routes; Title VI update; schedule and fare changes; assessing manpower and equipment needs; access-to-jobs; 2010 census update; needs assessment study; provide and improve BAT's analytical and forecasting capabilities; assist BAT with the Americans with Disabilities Act Plan update, Title VI Trend Analysis, Service Area Demographic Trend Profile, etc.
2. Provide technical planning assistance to area communities outside the transit authority district, on transit matters. This assistance can take the form of helping the towns in assessing potential membership in a transit authority; assisting the communities in providing for private carrier service; identifying and assessing park-and-ride lots; assessing commuter rail lots; encouraging private enterprise participation; encouraging minority business participation; 2010 census and journey-to-work update, etc.
3. Prepare information as needed for FTA reports, State Implementation Plan submissions, MassDOT reports, and other routine reporting.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

4. Provide transit input into regional transit and transportation modeling efforts, and Conduct air-quality analysis as needed for transit projects.
5. Review, update, and expand transit section of the regional transportation plan as needed.
6. Continue to provide assistance and guidance to applicants for Community Transit Grant Program in preparing applications and coordinating service.
7. Provide technical assistance to public and private non-profit agencies in the development, maintenance, and expansion of the elderly and/or individuals with disabilities services in the region.
8. Continue to provide support for the replacement of Section 5310 and Mobility Assistance Program vehicles, which have outlived their usual life.
9. Continue efforts to coordinate existing transportation services for the elderly and individuals with disabilities, as provided by numerous public and private non- profit agencies in Old Colony Region.
10. Develop updates for the Old Colony Human Service Coordination Plan in coordination with communities, transit providers, and regional coordination committees, as appropriate. Plan shall be reflective of MAP-21.
11. Operate and maintain a Congestion Management Process (CMP).
12. Conduct public health assessments and consider public health outcomes as part of ongoing planning and performance measures planning.

PRODUCT:

Provide technical assistance to BAT, GATRA, MBTA, SSCAC, and to area communities as needed; Information for compliance with federal and state requirements for the TIP; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study; Updated Old Colony Human Service Coordination Plan, as appropriate; Community Transit Grant Program Solicitation, Reviews and related Rankings; and, Regional Travel Demand Model, and RTP updates, as appropriate.

SCHEDULE:

To be carried out throughout the year.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
		\$41,620	\$10,405			\$52,025

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 4200 - BAT PLANNING, TECHNICAL ASSISTANCE, AND STUDIES
--

OBJECTIVE:

To provide transit-planning services, prepare technical studies, comprehensive service assessments, and provide assistance in other planning related activities that are called for during the year which presently are not specifically identified in work program.

PREVIOUS WORK:

BAT Comprehensive Regional Transit Plan; BAT fixed-route ridership analyses; Brockton Area Transit Farebox Analyses; Title VI Reports ; BAT Fare Elasticity Study; Air quality analysis for CMAQ and Transportation Demand Management proposals; Route 2A Study; Rockland Transit Feasibility Study; System Time Study; Abington Transportation Study; Human Services Coordination Plan.

PROCEDURES:

1. Develop a detail study(s) design/estimated work time effort and cost for planning tasks requested by Brockton Area Transit and agreed to by OCPC. The following is a list of planning/projects that could be undertaken as part of this task: Americans with Disabilities Act Plan Update; Route Evaluation Study/Survey; Fare Increase Analysis; Title VI Report Update; Title VI Trend Analysis; Transfer Study; Financial Plan Update; Demographic/Urban Area Analysis; Manley Street Industrial Park Route Analyses; Technical assistance to BAT, as needed, on the Intermodal Facility; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study; Avon/Stoughton Route extension planning; Fare Modeling Study; Massasoit Study; and, Stoughton Fixed Route Study.

2. Undertake planning, studies, and comprehensive service assessments in accordance with study requirements and available funding.

3. Prepare reports, maps, charts, etc. covering the work effort.

PRODUCT:

Planning services; Paratransit plan in conformity with Americans with Disabilities Act requirements; Route evaluation study; Fixed Route Ridership Report; Abington Transit Study; Hanson Transit Study; South Shore Medical Transportation Options Study; Avon/ Stoughton Route extension planning; Bridgewater State University Transit Route Expansion Study; Massasoit Reverse Commute Study; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study.

SCHEDULE:

To be carried out throughout the year. Schedules are contract dependent.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
				\$25,000		\$25,000

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 4300 – SOUTH COAST RAIL TECHNICAL ASSISTANCE

OBJECTIVE:

To provide South Coast Rail transit planning services, prepare technical studies and provide assistance in other planning related activities that are called for during the year which presently are not specifically identified in work program.

PREVIOUS WORK:

Regional Transportation Plan; Ridership Reports; Five Year PDA/ PPA Update; Tracking of Investments in PDAs/ PPAs; South Coast Rail Technical Assistance.

PROCEDURES:

Provide South Coast Rail Technical Assistance to member communities within rail corridor (Bridgewater, Easton, and Stoughton), and track implementation activities within PPAs and PDAs. Procedures may include direct cost expenses incurred as part of preparation of visualizations and renderings.

PRODUCTS:

South Coast Rail Technical Assistance and tracking of implementation activities within PPAs and PDAs.

SCHEDULE:

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
					\$25,000	\$25,000

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

OTHER OLD COLONY PLANNING COUNCIL FUNDING SOURCES AND OTHER PLANNING STUDIES

The OCPC is a comprehensive planning agency serving communities located in Southeastern Massachusetts. In addition to the range of transportation planning studies and activities described in this report, OCPC performs land use, economic development, elder services, environmental, and, comprehensive planning.

Estimates of Other OCPC Funding Sources

1.	Economic Development Administration	\$70,000
2.	Executive Of Elder Affairs	
	a. Administration	\$184,750
	b. Ombudsman Program	\$145,000
3.	District Local Technical Assistance	\$194,000
4.	Septic Repair Program	\$25,000
5.	Pre-Disaster Mitigation Plan	\$15,000

Listing of Other Transportation Planning Activities

The following is a listing of other transportation planning activities underway in the region that are not being funded with FHWA and/ or FTA funds included in the FFY 2016 Old Colony Unified Planning Work Program.

1. MassDOT Cape Cod Canal Area Transportation Study
2. MassDOT Route 3 Integrated Corridor Management Study
3. MassDOT South Coast Rail Project Design and Environmental Permitting

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TRANSPORTATION PLANNING STAFF

The following OCPC staff members will be working on the FFY 2016 Unified Planning Work Program and the percent efforts represents the approximate time devoted to the 3C Transportation Planning Tasks.

<u>Names</u>	<u>Title</u>	<u>% Efforts</u>
Pat Ciaramella	Executive Director	10%
Charles Kilmer, AICP	Assistant Director/ Transportation Program Manager	100%
Eric Arbeene, AICP	Community Planner	75%
Shawn Bailey	Transportation Technician	100%
Paul Chenard	Transportation Planner	100%
Raymond Guarino	Senior Transportation Planner	100%
Bruce Hughes	Economic Development/ Community Planner	25%
William McNulty	Senior Transportation Planner	100%
Kyle Mowatt	Transportation Planner	100%
Jimmy Pereira	Transportation Planner	100%
Andrew Vidal	GIS Manager/ Communications/ IT Specialist	75%
James Watson, AICP	Comprehensive Planning Supervisor	25%
Vacant	Transportation Planner	100%
Vacant	Transportation Technician	100%

**FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)
BUDGET ESTIMATES**

ELEMENT TASK DESCRIPTION	FHWA PL	MassDOT NFA	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
1000 - Management & Support of Planning and Certification Activities							
1100 3C Program Support	\$ 40,000	\$ 10,000	\$ 4,444	\$ 1,111	\$ -	\$ -	\$ 55,556
1200 Unified Planning Work Program (UPWP)	\$ 9,600	\$ 2,400	\$ 1,067	\$ 267	\$ -	\$ -	\$ 13,333
1300 Public Participation Program (PPP)	\$ 37,600	\$ 9,400	\$ 4,178	\$ 1,044	\$ -	\$ -	\$ 52,222
1400 Transportation Improvement Program (TIP)	\$ 32,800	\$ 8,200	\$ 3,644	\$ 911	\$ -	\$ -	\$ 45,556
1500 Title VI and Environmental Justice (EJ)	\$ 32,000	\$ 8,000	\$ 3,556	\$ 889	\$ -	\$ -	\$ 44,444
Element 1000 Subtotals	\$ 152,000	\$ 38,000	\$ 16,889	\$ 4,222	\$ -	\$ -	\$ 211,111
2000 - Data Reconnaissance, Acquisition, and Analysis Activities							
2100 Demographic Surveillance & Road Inventory Update	\$ 16,000	\$ 4,000	\$ 1,778	\$ 444	\$ -	\$ -	\$ 22,222
2200 Highway Data Surveillance and System Monitoring	\$ 40,800	\$ 10,200	\$ -	\$ -	\$ -	\$ -	\$ 51,000
2300 System Planning and Resource Activities	\$ 30,400	\$ 7,600	\$ 3,378	\$ 844	\$ -	\$ -	\$ 42,222
2400 Geographic Information System (GIS)	\$ 37,200	\$ 9,300	\$ 4,133	\$ 1,033	\$ -	\$ -	\$ 51,667
2500 Management Systems and Travel Demand Modeling	\$ 38,400	\$ 9,600	\$ 12,800	\$ 3,200	\$ -	\$ -	\$ 64,000
Element 2000 Subtotals	\$ 162,800	\$ 40,700	\$ 22,089	\$ 5,522	\$ -	\$ -	\$ 231,111
3000 - Short and Long Range Transportation Planning Activities							
3100 Regional Traffic Studies, ITS, and, Intermodal Planning	\$ 40,000	\$ 10,000	\$ 4,444	\$ 1,111	\$ -	\$ -	\$ 55,556
3200 Local Highway Transportation Technical Assistance (LTA)	\$ 41,771	\$ 10,443	\$ -	\$ -	\$ -	\$ -	\$ 52,214
3300 Avon and Brockton Route 28 Corridor Study	\$ 46,000	\$ 11,500	\$ 5,111	\$ 1,278	\$ -	\$ -	\$ 63,889
3400 Duxbury Route 3A Corridor Study	\$ 42,000	\$ 10,500	\$ 4,667	\$ 1,167	\$ -	\$ -	\$ 58,333
3500 MAP-21 Performance Management	\$ 24,000	\$ 6,000	\$ 2,667	\$ 667	\$ -	\$ -	\$ 33,333
3600 Bicycle and Pedestrian Connectivity and Safety Study	\$ 40,800	\$ 10,200	\$ 4,533	\$ 1,133	\$ -	\$ -	\$ 56,667
Element 3000 Subtotals	\$ 234,571	\$ 58,643	\$ 21,422	\$ 5,356	\$ -	\$ -	\$ 319,992
4000 - Other Transportation Technical Activities							
4100 Transit Technical Assistance, and Elderly and Individuals with Disabilities Support	\$ -	\$ -	\$ 41,620	\$ 10,405	\$ -	\$ -	\$ 52,025
4200 BAT Planning, Technical Assistance, and Studies	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -	\$ 25,000
4300 South Coast Rail Technical Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 25,000
Element 4000 Subtotals	\$ -	\$ -	\$ 41,620	\$ 10,405	\$ 25,000	\$ 25,000	\$ 102,025
Total of All Elements	\$ 549,371	\$ 137,343	\$ 102,020	\$ 25,505	\$ 25,000	\$ 25,000	\$ 864,239

APPENDICES

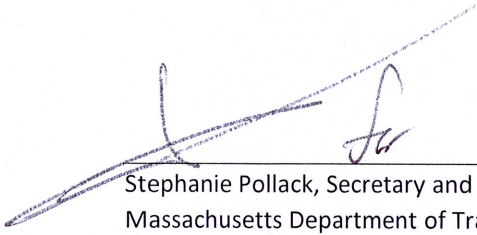
APPENDIX A

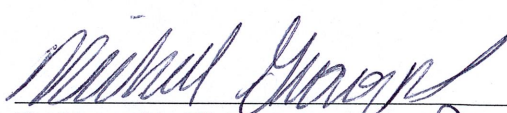
FFY 2016 Old Colony UPWP Adjustment Approved by the Old Colony MPO on May 17, 2016

OLD COLONY METROPOLITAN PLANNING ORGANIZATION (MPO)

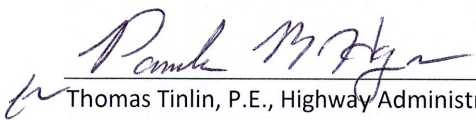
ENDORSEMENT OF FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP) ADJUSTMENT 1

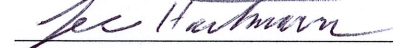
This is to certify that the Signatories of the Old Colony Metropolitan Planning Organization (MPO), at their Old Colony MPO meeting on May 17, 2016, hereby approve and endorse the FFY 2016 Old Colony Unified Planning Work Program (UPWP) Adjustment 1 in its entirety for the Old Colony Region, in accordance with the certified 3C Transportation Planning Process.


Stephanie Pollack, Secretary and CEO
Massachusetts Department of Transportation

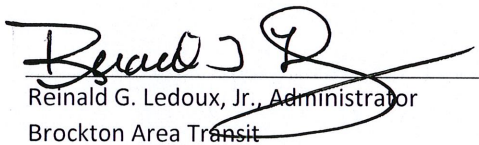
5/17/16
Date 
The Honorable Bill Carpenter, Mayor *for*
City of Brockton


5/17/16
Date


Thomas Tinlin, P.E., Highway Administrator
Massachusetts Department of Transportation


5-17-16
Date *for* 
Kenneth Tavares, Chairman
Plymouth, Board of Selectmen

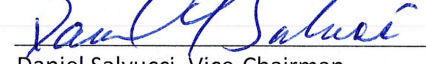
Date


Reinald G. Ledoux, Jr., Administrator
Brockton Area Transit

5.17.2016
Date 
Eldon Moreira, Chairman
West Bridgewater, Board of Selectmen

5/17/16
Date


Lee Hartmann, AICP, President
Old Colony Planning Council

5-17-16
Date 
Daniel Salvucci, Vice-Chairman
Whitman, Board of Selectmen

5/17/16
Date



Charlie Baker, Governor
 Karyn Polito, Lt. Governor
 Stephanie Pollack, MassDOT Secretary & CEO



UPWP Budget Reallocation

Please fill out all fields in the follow form, and send original signed form along with all documentation. The request will not be accepted for review if incomplete in any way. Please refer to your contract's special provisions, Attachment J, Article 1(c) for detailed requirements.

Date: May 17, 2016

From: Name: Charles Kilmer

To: David J. Mohler, Executive Director
 Office of Transportation Planning

Title: Assistant Director/ TPM

Attention: Trey Wadsworth

RPA: Old Colony Planning Council

Contract #: N/A; BAT Funds Only

The MPO has been consulted

Date consulted: May 17, 2016

Reason for reallocation:

Program additional BAT funds for additional transit technical assistance and planning.

Task/sub-task number and description	Existing amount	Proposed amount	Amount changed	Additional explanation
4200 - BAT	\$25,000	\$50,000	+\$25,000	Please see attached summary.

Authorized signature

Your request is: approved disapproved approved with qualifications Date: 05/18/16

Notes:

Signature: David Mohler, Executive Director

Ten Park Plaza, Suite 4160, Boston, MA 02116
 Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

FFY 2016 Old Colony UPWP Adjustment 1 Summary

Brockton Area Transit Authority (BAT) has requested that Task 4200 of the FFY 2016 Old Colony UPWP be adjusted to include the provision of planning assistance to address/ undertake alternatives analysis as identified in the Comprehensive Regional Transit Plan (CRTP), and to add \$25,000 in funding. Task 4200 is funded by BAT. As such, the proposed FFY 2016 Old Colony UPWP Adjustment 1 is as follows:

FFY 2016 Old Colony UPWP Adjustment 1

Task and Description	Existing Amount	Proposed Amount	Amount Changed	Additional Explanation
TASK 4200 - BAT PLANNING, TECHNICAL ASSISTANCE, AND STUDIES	\$25,000	\$50,000	+\$25,000	Brockton Area Transit Authority (BAT) has requested that Task 4200 be adjusted to include the provision of planning assistance to address/ undertake alternatives analysis as identified in the CRTP, and to include additional funding. Task 4200 is funded by BAT.

The Old Colony MPO was consulted on May 17, 2016 and approved FFY 2016 Old Colony UPWP Adjustment 1.

FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)

TASK 4200 - BAT PLANNING, TECHNICAL ASSISTANCE, AND STUDIES

OBJECTIVE:

To provide transit-planning services, prepare technical studies, comprehensive service assessments, and provide assistance in other planning related activities that are called for during the year which presently are not specifically identified in work program.

PREVIOUS WORK:

BAT Comprehensive Regional Transit Plan; BAT fixed-route ridership analyses; Brockton Area Transit Farebox Analyses; Title VI Reports ; BAT Fare Elasticity Study; Air quality analysis for CMAQ and Transportation Demand Management proposals; Route 2A Study; Rockland Transit Feasibility Study; System Time Study; Abington Transportation Study; Human Services Coordination Plan.

PROCEDURES:

1. Develop a detail study(s) design/estimated work time effort and cost for planning tasks requested by Brockton Area Transit and agreed to by OCPC. The following is a list of planning/projects that could be undertaken as part of this task: Americans with Disabilities Act Plan Update; Route Evaluation Study/Survey; Fare Increase Analysis; Title VI Report Update; Title VI Trend Analysis; Transfer Study; Financial Plan Update; Demographic/Urban Area Analysis; Manley Street Industrial Park Route Analyses; Technical assistance to BAT, as needed, on the Intermodal Facility; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study; Avon/Stoughton Route extension planning; Fare Modeling Study; Massasoit Study; **provide planning assistance and address/ undertake alternatives analysis as identified in the CRTP**; and, Stoughton Fixed Route Study.
2. Undertake planning, studies, and comprehensive service assessments in accordance with study requirements and available funding.
3. Prepare reports, maps, charts, etc. covering the work effort.

PRODUCT:

Planning services; Paratransit plan in conformity with Americans with Disabilities Act requirements; Route evaluation study; Fixed Route Ridership Report; Abington Transit Study; Hanson Transit Study; South Shore Medical Transportation Options Study; Avon/ Stoughton Route extension planning; Bridgewater State University Transit Route Expansion Study; Massasoit Reverse Commute Study; BAT/ GATRA (Brockton/ Taunton) Intercity Feasibility Study; **and provision of planning assistance and alternatives analysis as identified in the CRTP.**

SCHEDULE:

To be carried out throughout the year. Schedules are contract dependent.

FUNDING:

FHWA PL	MassDOT	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
				\$50,000. ADJUSTMENT 1: Increase amount from \$25,000 to \$50,000; Update Procedures Description and Product Description.		\$50,000. ADJUSTMENT 1: Increase amount from \$25,000 to \$50,000. Update Procedures Description and Product Description.

**FFY 2016 OLD COLONY UNIFIED PLANNING WORK PROGRAM (UPWP)
BUDGET ESTIMATES**

ELEMENT TASK DESCRIPTION	FHWA PL	MassDOT NFA	FTA 5303	OCPC	BAT	MassDOT SCR	TOTAL
1000 - Management & Support of Planning and Certification Activities							
1100 3C Program Support	\$ 40,000	\$ 10,000	\$ 4,444	\$ 1,111	\$ -	\$ -	\$ 55,556
1200 Unified Planning Work Program (UPWP)	\$ 9,600	\$ 2,400	\$ 1,067	\$ 267	\$ -	\$ -	\$ 13,333
1300 Public Participation Program (PPP)	\$ 37,600	\$ 9,400	\$ 4,178	\$ 1,044	\$ -	\$ -	\$ 52,222
1400 Transportation Improvement Program (TIP)	\$ 32,800	\$ 8,200	\$ 3,644	\$ 911	\$ -	\$ -	\$ 45,556
1500 Title VI and Environmental Justice (EJ)	\$ 32,000	\$ 8,000	\$ 3,556	\$ 889	\$ -	\$ -	\$ 44,444
Element 1000 Subtotals	\$ 152,000	\$ 38,000	\$ 16,889	\$ 4,222	\$ -	\$ -	\$ 211,111
2000 - Data Reconnaissance, Acquisition, and Analysis Activities							
2100 Demographic Surveillance & Road Inventory Update	\$ 16,000	\$ 4,000	\$ 1,778	\$ 444	\$ -	\$ -	\$ 22,222
2200 Highway Data Surveillance and System Monitoring	\$ 40,800	\$ 10,200	\$ -	\$ -	\$ -	\$ -	\$ 51,000
2300 System Planning and Resource Activities	\$ 30,400	\$ 7,600	\$ 3,378	\$ 844	\$ -	\$ -	\$ 42,222
2400 Geographic Information System (GIS)	\$ 37,200	\$ 9,300	\$ 4,133	\$ 1,033	\$ -	\$ -	\$ 51,667
2500 Management Systems and Travel Demand Modeling	\$ 38,400	\$ 9,600	\$ 12,800	\$ 3,200	\$ -	\$ -	\$ 64,000
Element 2000 Subtotals	\$ 162,800	\$ 40,700	\$ 22,089	\$ 5,522	\$ -	\$ -	\$ 231,111
3000 - Short and Long Range Transportation Planning Activities							
3100 Regional Traffic Studies, ITS, and, Intermodal Planning	\$ 40,000	\$ 10,000	\$ 4,444	\$ 1,111	\$ -	\$ -	\$ 55,556
3200 Local Highway Transportation Technical Assistance (LTA)	\$ 41,771	\$ 10,443	\$ -	\$ -	\$ -	\$ -	\$ 52,214
3300 Avon and Brockton Route 28 Corridor Study	\$ 46,000	\$ 11,500	\$ 5,111	\$ 1,278	\$ -	\$ -	\$ 63,889
3400 Duxbury Route 3A Corridor Study	\$ 42,000	\$ 10,500	\$ 4,667	\$ 1,167	\$ -	\$ -	\$ 58,333
3500 MAP-21 Performance Management	\$ 24,000	\$ 6,000	\$ 2,667	\$ 667	\$ -	\$ -	\$ 33,333
3600 Bicycle and Pedestrian Connectivity and Safety Study	\$ 40,800	\$ 10,200	\$ 4,533	\$ 1,133	\$ -	\$ -	\$ 56,667
Element 3000 Subtotals	\$ 234,571	\$ 58,643	\$ 21,422	\$ 5,356	\$ -	\$ -	\$ 319,992
4000 - Other Transportation Technical Activities							
4100 Transit Technical Assistance, and Elderly and Individuals with Disabilities Support	\$ -	\$ -	\$ 41,620	\$ 10,405	\$ -	\$ -	\$ 52,025
4200 BAT Planning, Technical Assistance, and Studies	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ -	\$ 50,000
4300 South Coast Rail Technical Assistance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ 25,000
Element 4000 Subtotals	\$ -	\$ -	\$ 41,620	\$ 10,405	\$ 50,000	\$ 25,000	\$ 127,025
ADJUSTMENT 1: Increase BAT amount from \$25,000 to \$50,000; Increase Element 4000 Subtotal from \$102,025 to \$127,025; Increase Total of All Elements from \$864,239 to \$889,239							
Total of All Elements	\$ 549,371	\$ 137,343	\$ 102,020	\$ 25,505	\$ 50,000	\$ 25,000	\$ 889,239